

THE EFFECTS OF DIFFERENT FORMS OF STUDENT RATINGS
FEEDBACK ON SUBSEQUENT STUDENT RATINGS OF PART-TIME FACULTY

BY

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This dissertation is dedicated to my mother, Helen Busch, who supported my early efforts to attain a college education despite a lack of financial resources.

To my husband, Juan, my best friend, mentor, and confidant, whom I want to thank for caring, understanding, and pushing me when I resisted.

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The primary purpose of the study was to determine the effect different forms of student ratings feedback had on subsequent part-time faculty student ratings and instructor self-ratings. Part-time faculty opinions towards student ratings of instruction were also explored.

A quasi-experimental design was used with two experimental groups receiving different forms of mid-term student ratings feedback, printed/oral consultation and printed only, and two control groups receiving no mid-term student ratings feedback. The population consisted of 94 part-time faculty; 53 teaching short-term, non-credit courses and 41 teaching long-term, credit courses. Instructor self-ratings were also incorporated into the design.

The evaluation tool used to assess the two dependent variables, student ratings of instruction and instructor self-ratings, was the Instructional Development and Effectiveness Assessment (IDEA) standard

form. Results indicated that, generally, feedback had a modest, but non-significant effect on part-time faculty student ratings ($p < .05$). When compared to the printed only feedback condition, the printed/oral consultation feedback condition appeared not to have effected subsequent student ratings of part-time faculty. Therefore, similarities between the two feedback conditions appeared greater than the differences. The most significant change ($p < .05$) in subsequent student ratings was found in part-time faculty teaching short-term, non-credit courses in the two feedback conditions. Instructor self-overrating and underrating by part-time faculty seemed to produce a higher awareness of teaching practices resulting in a change in final instructor self-ratings. Post hoc analyses of instructor demographic variables relating to sex, educational credentials, and teaching experience found teaching experience to be a critical variable ($p < .05$) to student opinion of instruction. Analyses of class motivational level found students enrolled in short-term, non-credit courses more highly motivated at the .05 level of significance.

Implications are that student ratings of instruction could be utilized as an effective and appropriate evaluation tool for part-time faculty teaching non-credit courses. Instructor self-evaluation may be used to heighten part-time faculty awareness of teaching behavior. Recommendations for staff development applications are included.

CHAPTER ONE

INTRODUCTION

Adult part-time student participation in organized learning activities has increased significantly within the last two decades. Boaz's (1978) study indicated over five million part-time students enrolled in institutions of higher education nationally and a total of over 21 million persons participating in adult education courses or programs. In a 1980 study, which included interviews of a national representative sample of 2,000 Americans 25 years of age and older, Aslanian and Bricknell (1980) showed that half of the adult learners interviewed had studied at least two different topics in the past year. Cross (1980) has cited this rapid growth of adult learners as a major trend in American higher education today and an indication that the United States has become a learning society.

The demand for adult education is often being met by new learning structures, one of which is non-credit, continuing education courses, taught by part-time instructors who are hired often for their "expertise" in a particular field. According to Bender and Hammons (1972) part-timers bring something new to the classroom--a breath of the real world, in the form of day-to-day experiences" (p.21). Because of their various professional backgrounds, the instructors come to the classrooms with different experiences and expectations from full-time instructors. Gaff (1975) indicated that these new learning structures often impose a different demand on learning and teaching.

Since non-credit courses imply a non-graded structure, part-time instructor teaching behavior and accountability to course content often are solely measured by student evaluations of instruction. Research indicates that students are capable of identifying and describing teaching behaviors which are conducive to their learning environment (Costin, Greenough, & Menges, 1971; Feldman, 1976b; Kulik & Kulik, 1974). Therefore, student opinion of instruction has become a widely accepted and utilized evaluation tool. Although the results of student evaluations are intended to help improve teaching, the results often are seen only by the instructor. The underlying assumptions are that part-time instructors value student opinions, can analyze the results, and will utilize these results to alter and improve their teaching behavior.

Although there are a variety of different learning needs and expectations of both adult students and part-time instructors, few instructional improvement opportunities exist for faculty within institutions that offer adult learners continuing education courses. Two recurring problems are the effectiveness of the evaluation of part-time faculty and the participation of part-time faculty in staff development opportunities that do exist.

The expansion in the use of part-time faculty has precipitated the adoption of various forms of teaching evaluation methods developed for and utilized previously with full-time faculty. One of these evaluation methods is the widely-utilized student ratings of instruction. Aleamoni (1978), Braunstein, Klein, and Pachla (1973), Centra (1973b), McKeachie and Linn (1975), and Stevens and Aleamoni (1985) demonstrated how the impact of student ratings of instruction can be increased with the use

of feedback to effect certain instructional changes. Using a meta analysis of student ratings feedback studies, Cohen (1980) indicated that overall, instructors who received mid-term student ratings feedback averaged .16 of a ratings point higher on end-of-term student ratings than instructors who did not receive feedback. Centra (1973b) combined augmented student feedback with instructor self-evaluation. He demonstrated that teachers who were "unrealistic" in observing their own behavior via self-evaluation of instruction as compared to their students' opinion of the same instruction tended to make changes in their instructional practices. Centra also found that more instructors "change if given information to help them interpret scores" (p.297). In other words, student ratings led to changes only when teachers saw the results in such a way that increased their impact, such as counsel from a master teacher or extensive narrative evaluations from students (Centra, 1973b, McKeachie, Linn, & Mann, 1971, Stevens & Aleamoni, 1985). The theoretical justification behind Centra's (1973b) study was developed by Gage, Runkel, and Chatterjee (1963) and may be found in equilibrium theory. Equilibrium theorists assumed that when a condition of "imbalance" (Heider, 1958), or "dissonance" (Festinger, 1957, 1964), or "asymmetry" (Newcomb, 1959) was created, psychological discomfort was experienced. This, in turn, "motivated" the person to reduce the dissonance or imbalance and achieve consonance (balance), and to avoid situations which would increase dissonance.

Each of these studies utilized full-time faculty or teaching assistants. The improvement of teaching practices of part-time faculty is a significant problem facing American higher education today. Therefore,

there is an apparent need to look more closely at the evaluation methods of part-time instruction. If the student ratings of instruction evaluation tool is an effective and productive one for part-time faculty, educators can utilize this information to change teaching behaviors. Such an investigation would help increase the usefulness of student instructional ratings for improvement purposes.

Statement of the Purpose

The primary purpose of this study was to determine the effect different forms of student-ratings feedback had on subsequent part-time faculty student ratings and instructor self-ratings. Part-time faculty opinions towards student ratings of instruction were also explored.

Gage (1972) indicated that people acquire attitudes and behaviors through a process of learning, and that knowledge of results or "feedback" is a fundamental condition of learning. Therefore, such knowledge of results can lead to changed behavior. Centra (1973a) showed that student feedback did effect some changes in student ratings over time. Since these findings suggest that feedback facilitates behavioral change, and behavioral change requires time, student ratings feedback should have a more positive effect on the instructional behavior of part-time faculty teaching longer-term courses than those teaching shorter-term courses. Therefore, the effectiveness of student ratings feedback as an evaluation tool for part-time faculty is the focus of this investigation.

Hypotheses

This study tested the following directional and null hypotheses at the .05 level of significance:

1. Part-time faculty who receive printed summary feedback along with oral consultation about their mid-term student ratings will receive higher end-of-term student ratings than part-time faculty who receive only printed summary feedback of mid-term student ratings, and part-time faculty who receive only printed summary feedback of mid-term student ratings will receive higher end-of-term student ratings than part-time faculty who do not receive mid-term student ratings feedback.

2. Part-time faculty assigned to both the mid-term feedback and no-feedback groups whose self-ratings of instruction are higher than their students' ratings of instruction at mid-term will receive higher end-of-term student ratings than part-time faculty whose self-ratings of instruction are equal to or lower than their students' ratings of instruction at mid-term.

3. Part-time faculty assigned to both the mid-term feedback and no-feedback groups whose self-ratings of instruction are higher than their students' ratings of instruction at mid-term will lower their end-of-term self-ratings of instruction.

4. Part-time faculty assigned to both the mid-term feedback and no-feedback groups whose self-ratings of instruction are equal to or lower than their students' ratings of instruction at mid-term will raise their end-of-term self-ratings of instruction.

5. Part-time faculty teaching long-term courses who receive mid-term student ratings feedback will receive higher end-of-term student ratings than part-time faculty teaching short-term courses who receive mid-term student ratings feedback.

6. There is no significant difference between the opinions of part-time faculty teaching long-term courses and part-time faculty teaching short-term courses towards student ratings of instruction.

Need for the Study

Although student ratings of instruction appear to be the dominant evaluation tool in non-credit, continuing education courses for adult students, their influence on teaching behavior is still debatable. Since their use is an adoption of full-time faculty evaluation methods, the appropriateness of their use with part-time faculty is in question. Past research resulted in voluminous studies focusing on the reliability and validity of student ratings as a measure of instructional mode. Recent researchers indicate increased attention directed toward enhancing the efficiency and effectiveness of student ratings in changing instructional behavior through the use of written and oral feedback.

Because of the widespread acceptance and interest in the use of student evaluation of instruction data, several good ratings forms have been developed. One of these is the Instructional Development and Effectiveness Assessment form (IDEA) developed by Kansas State University in 1975. This instrument is based on the assumption that there are different styles of effective teaching which are dependent upon the goals of the course and the characteristics and motivational level of the students. Hoyt (1973) helped develop a questionnaire format which asks students in various classes to rate their progress on 10 different learning objectives, describe the instructor's behavior, and describe different aspects of the course. A separate form was developed to col-

lect instructor ratings of the importance of each of the 10 learning objectives mentioned.

Aleamoni (1978), Braunstein et al. (1973), Centra (1973b), Cohen (1980), McKeachie (1969), and Tuckman and Oliver (1968) demonstrated how the impact of student ratings of instruction can be increased through the use of feedback to positively effect certain instructional changes. All of these studies concerned full-time faculty or teaching assistants teaching credit courses. Therefore, there is an apparent need to carry the research one step further in order to determine the usefulness and appropriateness of student ratings of instruction with part-time faculty.

Delimitations

The population for this study was the instructors listed in the Lifelong Learning Catalogue of Non-Credit Courses, University of South Florida, spring, 1986, and the instructors contracted to teach courses in the Weekend College of the Educational Service Department at Saint Leo College, Saint Leo, Florida. These listings may or may not have included all instructors of non-credit courses, since an instructor's name may have been inadvertently omitted from the list, or an instructor may have been contracted to teach a course after the catalogue went to print. The list included nearly all instructors hired to teach the non-credit courses in the Division of Lifelong Learning, School of Extended Studies, University of South Florida, Tampa, Florida, and at Saint Leo College in Saint Leo, Florida.

Due to time, energy, and resource availability constraints, the following delimitations (self-imposed by the researcher) also existed in the study:

1. The researcher did not attempt to determine the amount of student ratings feedback desirable for instructors participating in the study.
2. The areas of feedback which should be included to effect an impact on teaching behavior was not determined in this study. The basis for change was limited to the 10 learning objective items and the overall evaluation score on the student evaluation of instruction form utilized for both self-evaluation and student evaluation and the type of feedback received.
3. No attempt was made to analyze any possible long-term effects student feedback might have had on teaching effectiveness or subsequent student ratings.
4. The optimal level of feedback specificity to effect instructional behavioral changes on either a short- or long-term basis was not a focus of this study.
5. Beyond the student ratings data, the researcher did not attempt to investigate the teaching ability of the instructors. The extent of change in student reported teaching behavior due to self-rating of instruction and/or student ratings of instruction with printed feedback, and/or printed feedback with oral consultation was investigated.

Limitations

1. The assumption that any change in instructors' teaching behaviors from pre-evaluation to post-evaluation was the result of in-

structors participating in a self-rating, receiving printed student feedback, or receiving oral consultative feedback, is debatable. Any changes in teaching behavior during the pre-evaluation/post-evaluation interval of the study may have possibly occurred as a result of other moderating variables other than the pre-evaluation, instructor self-rating, and/or feedback variables.

2. The quasi-experimental design did not allow the students to be randomly assigned to treatment groups. The lack of random student assignment could have resulted in very different or biased groups per each instructor.

3. The generalization of the results of the students was limited to part-time faculty teaching non-credit courses at the University of South Florida and to part-time faculty teaching credit courses in the Weekend College of Saint Leo College.

4. The researcher did not attempt to analyze or categorize teaching effectiveness other than that indicated by student ratings of instruction. Other measures of teaching effectiveness could have included classroom observations, video-taping, peer evaluation, etc.

5. The assessment of the importance given to student evaluations by instructors was limited to that of a simple survey questionnaire.

6. Given time restraints and sample size limitations by the researcher, the treatments in the study were limited to two different forms of feedback, printed data with oral consultation and printed data only. Other treatment groups could have included varying amounts of personal, consultative feedback, i.e., individual consultative feedback.

Operational Definitions

The following definitions were used in this study:

Comparative data feedback. A printed summary comparing item means of the instructor's self-evaluation data to students' item means feedback data as measured by the Instructional Development and Effectiveness Assessment standard form (Kansas State University, 1975).

Continuing education. An organized, non-credit learning opportunity for adult students.

Course coordinator. An employee of the Division of Lifelong Learning, School of Extended Studies, University of South Florida, responsible for coordinating and scheduling non-credit, continuing education courses for adults.

End-of-term measure. The final administration to all students present during the last class meeting for both short-term and long-term courses of the Instructional Development and Effectiveness Assessment standard form (Kansas State University, 1975).

Instructor Questionnaire. A short, five-item questionnaire assessing instructors' personal opinions of general student rating evaluation tools.

Instructor self-evaluation data. The self-assessment responses to items on the Instructional Development and Effectiveness Assessment (IDEA) (Kansas State University, 1975) rating form of instructors teaching both long-term and short-term courses.

Long-term course. A 14-week long, college credit course for adults offered on the weekends at various course locations in the Tampa Bay area through Saint Leo College.

Mid-term measure. The first administration to all students present during the third or fourth class meeting (for short-term courses) and the seventh class meeting (for long-term courses) of the Instructional Development and Effectiveness Assessment standard form (Kansas State University, 1975).

Non-credit course. An organized learning activity for adults of shorter duration than credit courses which, upon completion, earns no college credit.

Part-time faculty. An instructor contracted to teach one or two non-credit, continuing education courses for adults in the Division of Lifelong Learning, School of Extended Studies, University of South Florida or one or two credit courses offered on weekends through the Weekend College of Saint Leo College during the spring semester, 1986.

Printed summary feedback with oral consultation. The computer print-out summary results of the student ratings response data to items on the Instructional Development and Effectiveness Assessment standard form (Kansas State University, 1975) and comparative data of student ratings to instructor self-ratings as interpreted in an individual conference by the course coordinator with the course instructor along with suggestions for improvement.

Printed summary feedback. The computer print-out summary results of the student ratings response data to items on the Instructional Development and Effectiveness Assessment standard form (Kansas State University, 1975) and comparative data of student ratings to instructor self-ratings with printed instructions for self-interpretation.

Short-term course. Six- to eight-week long, non-credit, continuing education course for adults offered in the Division of Lifelong Learning, School of Extended Studies, University of South Florida.

Student ratings. The mean score rating of the 10 learning objectives and the standardized score of the overall evaluation in Part I Evaluation Progress Ratings section of the IDEA standard form (Kansas State University, 1975).

Teaching behavior. Specific instructional behavior as measured by items on the Instructional Development and Effectiveness Assessment standard form (Kansas State University, 1975).

Organization of Remainder of the Research Report

The following chapters are utilized in the remainder of the research report. Chapter Two includes the growth of adult and continuing education and the increased use of part-time faculty in general. Additional research and literature that were pertinent to the investigation also are included in this chapter. Chapter Three contains the procedures utilized to test the feasibility of the evaluation instruments, the pilot study, as well as the research design and complete methodology used in the study. Chapter Four contains the findings and analysis of data. Chapter Five includes the summary of the findings and the conclusions drawn as a result of the study, as well as implications for practices and further research.

CHAPTER TWO

REVIEW OF THE LITERATURE AND RELATED RESEARCH

To acquire an accurate understanding of the relationship between teaching behavior and student feedback in higher education, an examination of relevant research is presented in the following areas: (a) growth of adult and continuing education, (b) part-time faculty and faculty development practices, (c) adult development, (d) source of student feedback, (e) nature and impact of student feedback, and (f) summary and conclusions. It is acknowledged that student feedback which is used for other purposes such as pedagogy and administrative decision making also is directed at changing teaching behavior. This review, however, focuses on the use of student feedback for instructors.

Growth of Adult and Continuing Education

Social policy changes and attitudes during the late 1960s and early 1970s resulted in the opening wider of the doors of American institutions of higher education to an unprecedented number of non-traditional students. These open-admission policies, stated Cross (1980), resulted in a significant increase in the number of part-time adult learners who "constitute the most rapidly growing segment in American education" (p.627). A 30.8% growth in adult student participation in organized learning activities occurred between 1969 and 1975. This increase, according to Parson (1979), was more than double the increase in the adult population during the same time period. The United States Bureau of Census data indicated that in 1981, 21 million adults participated in

courses or programs of one type or another, representing 13% of the total adult population in the United States. The majority of adult students enrolled in these learning activities were enrolled on a part-time basis.

Part-time Faculty

The literature reviewed in this and the next two sections falls into three categories: part-time faculty, faculty development practices, and adult development.

As institutional credit and non-credit enrollments expanded, demand for increased numbers of college faculty continued to be met through the increased employment of part-time, adjunct faculty at on-campus as well as various off-campus locations. The perfunctory practice of the use of part-time faculty has changed the staffing patterns of institutions of higher education. Bender and Hammons (1972) reported, in a national survey that part-time faculty composed 40% of the total 122,138 faculty members in lower division colleges in the United States. Although reasons for the phenomenal growth in the utilization of part-time instructors have varied according to individual institutions, some common factors cited for justification included availability, flexibility, expertise, salary cost differentials, and community relations (Friedlander, 1980; Hammons, 1981; Kuhns, 1963; Lombardi, 1976). Cruise, Furst, and Klimes (1980) indicated that with typically no health insurance, pension, or other benefits, part-time teachers cost considerably less, no matter which unit of output is measured. Spofford (1979) cited U.S. Department of Labor estimates of nearly 80,000 new Ph.D.s joining the ranks of 100,000 available adjuncts as evidence of

growing part-time faculty labor availability. Part-time faculty utilization allowed administrators much greater flexibility with class locations and time schedules (Friedlander, 1978; Kuhns, 1963; Lombardi, 1975). Such utilization also provided an important link with local governmental agencies, community organizations, and industry.

In a 1980 study based on the 1975, 1977, and 1978 Center for the Study of Community Colleges (CSCC) surveys, Friedlander explored teaching behavior discrepancies between full-time and part-time faculty. Significant differences were found between part-time and full-time instructors on most measures related to instructional practices. Specifically, part-timers tended to have less rigorous instructional requirements, less teaching experience, fewer teaching credentials, fewer out-of-class student contacts, and less emphasis on written assignments than did full-time faculty.

Cruise et al. (1980) evaluated the instructional effectiveness of part-timers by utilizing student, administrator, and teacher self-evaluation instruments. They concluded there were no statistical differences between the instructional behavior of full-timers and part-timers. Bender and Hammons (1972), utilizing student judgment as their criterion, found that "both the full-time and part-time faculties possessed the same strengths and weaknesses in their teaching" (p.22). Guthrie-Morse (1981), however, expressed the possibility of qualitative differences in reference to inadequate part-time supervision, evaluation, commitment, and experience.

As research of part-time faculty indicated qualitative differences, so too did research of part-time student characteristics and their

learning needs. Aslanian and Bricknell (1980) indicated that adults are motivated to learn following transitions from one status in life to another. Such transitions may be caused by many factors, including technological advancement, job re-training, mandated education for professional re-licensure or re-certification, personal growth and development needs, as well as an increased acceptance and focus of the lifelong learning concept. Queeney (1982) characterized these adult students as a fairly elite, well-educated group with different learning expectations from traditional students, while Wolfgang and Dowling (1981) demonstrated significant differences between traditional age and older students in terms of motivation. Kuh and Ardiolo (1979) studied the differences between traditional age and older students. They reported that the new, extremely diverse student body had a more difficult time adjusting to new situations, had feelings of inadequacy and self-doubt, and preferred traditional teaching methodologies which younger students tended to reject.

The combination of changing student characteristics with different learning needs and expectations, new educational settings, and instructional methods has required different teaching practices and new student relationships for part-time instructors. New learning structures such as non-credit, off-campus, short-term courses have also created new environments with new learning and teaching demands for part-time faculty. Faculties must, therefore, acquire new ideas, teaching techniques, and skills to meet these challenges; instructional staff development implications are eminent.

Faculty Development Practices

Effective teaching has been a complex set of interrelated attitudes, knowledge, skills, values, and motivations according to Gaff (1975). Because of the increased diversity among students, the improvement of teaching behavior and student learning has necessitated faculty awareness of the complex interactions among students, institutions, and teachers.

Many institutions of higher learning have developed programs to cultivate and facilitate instructional improvement through faculty development in order to meet these new needs and challenges. An early study by Miller and Wilson (1963) indicated that the most commonly reported development activities made available to part-time faculty dealt with adjusting to rules and regulations of the college, in other words, a simple "orientation session." Few opportunities were given to improve communications or teaching techniques, other than financial assistance for attendance at professional meetings and conferences by some departments. Very little has been done to enhance faculty development activities for part-time faculty. According to Moe (1977) in a study by the Instructional ACction Center, "part-time faculty development was a top concern" among the institutions surveyed. However, the most common inservice activity made available to part-time faculty concerned the rules and regulations of the institution. Smith (1980) found that some of the weakest staff development programs were those for part-time faculty.

Gaff (1975) in a study of faculty development practices among colleges and universities revealed a common set of assumptions upon which

the general goal of instructional improvement rests. He reported that three different approaches basically were employed: faculty development, instructional development, and organizational development.

In the last decade more attention has been focused on part-time faculty development. Although several models have been developed, little emphasis has been expended on providing developmental assistance to part-time faculty on teaching strategies (Leslie, Kellams, & Gunne, 1982). Cost to the institution, lack of time and interest or commitment on the part of the instructor, and great diversity among part-time faculty are reasons identified for minimal part-time faculty development efforts (Leslie et al., 1982; Weichenthal, Means, & Kozall, 1977).

The uniqueness of part-time instructors should be considered and incorporated into development activity design as well as the individual's own development needs and motivations (Emmet, 1981). Increased research has resulted in the development of new models based on the needs of part-time faculty (Black, 1981; Hammons, 1981; Jamerson, 1979; Moe, 1977; Pedras, 1984; Pierce & Miller, 1980). Staff development topics for part-time faculty have included institutional mission, adult students, instructional development and delivery, evaluation techniques, learning theory, and collective bargaining (Pedras, 1984).

Adult Development

In spite of the well-documented trend in the increase of the utilization of part-time instructors by continuing education institutions and the increase in staff development activities, considerably less research attention has been given to instructor motivation and adult development needs as related to changes in teaching behaviors.

Previously most human development studies have had a child-centered orientation with no integrated theory to encompass total life span (Neugarten, 1968). In recent years, however, there has been an increase in research focused on adulthood. In an attempt to chart the progress of adult development, gerontological research has steadily expanded knowledge concerning middle-age and older adults.

Of particular interest was the research of Chickering (1981), Erikson (1972), Gould (1979), Levinson (1978), and Sheehy (1974). They indicated that adults, like children, develop through several distinguishable stages or transitions. The pervasive similarity of this research to child development seemed to indicate that, even though experiencing sequential transitions, the quest for stability rather than change was the rule for the remainder of adulthood. A developmental and holistic perspective on adulthood allowed an appreciation and awareness of the shifting mix of stability and change during the life cycle (Knox, 1977). Based on Levinson's (1978) life transitions, more recent researchers have identified life issues related to college faculty and administrators. Faculty careers were associated with age stage development by Duncan and McCombs (1982).

Since basic learning theory held that the learning of new behavior was easier than eradicating earlier learned behavior and replacing such behaviors with others, results of adult development research had significant implications for developing faculty and changing teaching behavior. If stability was preferred to change as people grew older, then a given amount of change should require more effort and possibly more dynamic and powerful environments as a behavior or trait stabilized.

According to Sanford (1973), for change to occur at all there needed to be the presence of "an appropriate and effective challenge, one that is sufficient to upset the equilibrium, but not so extreme as to induce regression; in other words, not too severe in an objective sense and not beyond the limits of the individual's adaptive capabilities" (p.16). For faculty members, the increased call for accountability and prevalent use of student evaluations of instruction techniques may provide such a challenge.

Compared to the scope and number of studies conducted regarding the characteristics and motives of students and full-time instructors of credit activities, relatively few studies have been conducted concerning the teaching characteristics, motives, and effectiveness of part-time, non-credit, continuing education instructors. Although there has been a paucity of available data, there were even fewer substantive data concerning part-time instructor teaching ability as measured by student ratings of instruction. Consequently, the suspicion many critics hold of part-time faculty members' teaching ability and effectiveness has remained high, and continued questioning of their commitment to higher education goals shall prevail until more studies are conducted relative to the teaching performance of part-time faculty.

Sources of Student Feedback

As student opinions of instruction became one of the dominant evaluation tools in higher education, the credibility of students as a source of information on teaching behavior has frequently and continually been questioned by the opponents of this form of evaluation (Hildebrand, Wilson, & Dienst, 1971; Page, 1974). The argument

presented has been that students are not competent judges of instruction because of lack of experience and knowledge, as well as the influence of extraneous factors to the quality of teaching such as environmental stimuli, grade point average, and degree of interest in the subject matter.

Doyle (1975) indicated that whatever instructor data are gathered from whatever source needed to be evaluated in terms of reliability, validity, generalizability, and utility. Centra (1973a), Costin et al. (1971), and Hildebrand et al. (1971) all found student ratings to be reliable in terms of consistency and stability over time. Reliability coefficients in the .80s and .90s have been obtained with consistency for a class size of 20 or more students (Gage, 1974).

Validity has been defined as the extent to which ratings measure what they are intended to measure. Studies to establish the validity of student ratings have generally reported positive results (Aleamoni & Yimer, 1973; Costin et al., 1971; Gessner, 1973; Marsh, 1977; McKeachie, Linn, & Mann, 1971; Sullivan & Skanes, 1974). Shingles (1977) reported that procedures used to reduce the influence of extraneous factors do not seem to change instructors' concerns about what student ratings actually measure. On the other hand, Aubrecht (1979) suggested that if instructors accept and value knowing how satisfied their students are and how they perceive their teaching behavior, student ratings are a credible and reliable source of information to be utilized. As student ratings as a data source for information on teaching effectiveness have increased, so has the body of research literature in this area. Although there remain concern and reservation over the use of student-

ratings data as appropriate and sufficient criteria for administrative decisions of teaching effectiveness (Menges, 1979), their use for instructional improvement purposes has become an accepted practice (Cohen, 1980).

Nature and Impact of Student Feedback

It generally has been accepted that students are capable of identifying and describing specific teaching behaviors which are conducive to their learning environment (Costin, et al., 1971; Feldman, 1976a; Kulik & Kulik, 1974; Kulik & McKeachie, 1975). Many techniques have been used over the years to identify and describe effective teaching. Hildebrand et al. (1971) surveyed students and faculty at the University of California, Davis. Students were asked to identify the worst and best teachers' characteristics. The most frequently mentioned characteristics were such items as ability to explain clearly, enthusiasm, interest in teaching, willingness to help students, friendliness towards students, knowledge of subject, and organization. Many of these same qualities have been found in similar studies by Crawford and Bradshaw (1968), Gaff and Wilson (1971), and Perry (1969). Studies such as these have been the basis of items institutions utilize as an important research and evaluation tool of teaching behavior with predictable reliability and validity (Feldman, 1977).

If one can agree with Gage (1972) that people acquire their attitudes and behaviors through a process of learning and that knowledge of results or "feedback" is a fundamental condition of learning, then it follows that such knowledge of results could lead to changed behavior. This viewpoint is based on the assumption that teachers value student

opinion enough to alter their instructional practices when necessary or at least their attitude towards change in instructional practices. This assumption bears examination, however.

Glassman and Rotem (1977) reviewed a large body of research on student feedback and concluded that although student ratings data may be valuable for individual instructors, overall, these data have had minimal impact, at best, in changing teacher behavior. Thomas (1980) showed that graduate student feedback to professors seemingly did not change professors' teaching behavior nor did it significantly change professors' self-perceptions of their teaching behavior. On the other hand, Aleamoni (1978) and Stevens and Aleamoni (1985) all found that instructors who received augmented student ratings feedback improved on certain teaching dimensions over a period of time. In a more recent critical review of the research concerning college teaching improvement, Levinson-Rose and Menges (1981) indicated that of 93 studies reviewed, 78% supported intervention strategies. After a meta analysis of student ratings feedback, Cohen (1980) showed that, in general, instructors who received student ratings feedback averaged .16 of a ratings point higher on end-of-term ratings than instructors who received no feedback. The use of student ratings consultation feedback as a tool for instructional improvement was investigated by McKeachie et al. (1971). Their study consisted of two experimental faculty groups (consultation feedback of student ratings and printed feedback of student ratings) and one control faculty group (no feedback). Mid-semester and end-of-semester measures of student ratings of instruction were compared to study the effect of consultative student ratings feedback to printed student ratings feed-

back on teaching effectiveness. Their results indicated consultation enhanced the positive effect of the student ratings feedback and resulted in subsequently higher student ratings of the participating faculty. Erikson and Erikson (1979) demonstrated significant effects in the use of a consultation form of augmented student ratings feedback in the faculty evaluation processes. Based on the analysis of 22 studies, Cohen (1980) found that student ratings feedback had a modest but positive effect on improving college instruction as measured by subsequent student ratings. Specifically, a typical instructor who received augmented feedback performed at the end of the semester at the 74th percentile. The instructor who only received mid-semester student ratings performed at the 58th percentile; the instructor receiving no feedback performed at the 50th percentile. Aleamoni (1978) showed that instructors who received consultation improved their student ratings on at least two of five dimensions over a period of one semester to one year. His design, however, utilized non-equivalent control groups which raised questions of threats to internal validity and possible regression to the mean (Levinson-Rose & Menges, 1981). Centra (1973b) combined augmented student feedback with instructor self-evaluation. He demonstrated that teachers who were "unrealistic" in observing their own teaching behavior via self-evaluation of instruction as compared to their students' opinion of the same instruction, tended to make changes in their instructional practices. An additional finding of his was that a wider variety of instructors "change if given information to help them interpret scores" (p.297). In other words, student ratings led to changes only when teachers saw the results in such a way that increased their

impact, such as counsel from a master teacher or extensive narrative evaluations from students (Centra, 1973b; McKeachie et al., 1971; Stevens & Aleamoni, 1985).

Centra's (1973b) study was developed from research by Gage, Runkel, and Chatterjee (1963) and may be based in equilibrium theory. Equilibrium theorists assumed that when a condition of "imbalance" (Heider, 1958), or "dissonance" (Festinger, 1957, 1964), or "asymmetry" (Newcomb, 1959) was created, psychological discomfort was experienced. This, in turn, "motivated" the person to reduce the dissonance or imbalance and achieve consonance (balance), and to avoid situations which would increase dissonance. When instructors receive student ratings feedback with no help in interpretation or no explanation, ratings have provided little help in effecting change. Accordingly, it follows that student ratings feedback or consequences of behavior must be augmented to indicate to instructors how close their behavior approaches a given expectation and then how much and in what direction they should change their behavior if they want to come closer to that behavior, restore a condition of "equilibrium," and utilize the data for improvement purposes (Cohen, 1980; Rotem, 1978).

Summary of the Chapter

Adult continuing education enrollment continues to increase at a rapid rate with non-traditional adult students who come to the classroom with different learning levels, needs, and expectations. Much of the demand for this type of learning activity is being met through the use of part-time faculty at various teaching locations. While the use of part-time faculty predominates, faculty development opportunities for

them to improve teaching effectiveness remains minimal. Accountability of the effectiveness of part-time instruction appears to be measured by the widely-accepted student ratings of instruction, which is an evaluation tool adapted from full-time faculty evaluation systems.

The major implication of the present review of the research and related literature is that validity of student opinions of instruction as an instructional evaluation tool is debatable. However, despite the controversy and strong opposition, student ratings of instruction still have been universally utilized and endorsed by students and educators alike. Feedback of student opinion of instruction has been shown to be a significantly effective tool in changing instructional behavior (Aleamoni, 1978; Centra, 1973b; Cohen, 1980; Levinson-Rose & Menges, 1981; McKeachie & Linn, 1975; Rotem, 1978). Therefore, if student feedback can possibly be made to be more effective and provocative, a more significant change in teaching behavior as measured by student ratings and other instruments or observational strategies may be observed.

It appears that much attention has been given to the reliability and validity of student ratings as a method for evaluating instructional behavior. Based on the literature review, it is apparent that as part-time faculty enter the classroom they encounter non-traditional students in new educational settings with different learning expectations. Given the significant differences in new learning structures and teaching demands being made of part-time faculty as compared to their full-time counterparts, there has been a gap in the research on the impact of student ratings on instruction of part-time faculty. While student ratings feedback research has indicated that overall, feedback has had a sig-

nificant effect on changing instructional behavior, each of these studies involved full-time faculty or teaching assistants. Because the teaching effectiveness of part-time faculty has continued to be measured predominantly with similar student ratings of instruction tools, it therefore seemed appropriate that an investigation be made of the effect of student ratings feedback on part-time faculty. After careful analysis of the results of related research studies, the researcher expected student ratings feedback to have a significant effect on the subsequent student ratings of part-time faculty.

CHAPTER THREE

METHODOLOGY

The primary purpose of this study was to determine the effect different forms of student ratings feedback had on subsequent part-time faculty student ratings and instructor self-ratings. This chapter contains the description of the general research design, instrumentation, population, pilot study, collection of data, and analysis of data used in this investigation.

In a study of the effectiveness of student ratings feedback on college instruction, Centra (1973b) utilized a three-group design which included an experimental faculty group (written feedback), and two control faculty groups (no feedback and posttest only with mid-semester and end-of-semester measures). On the basis of equilibrium theory, a major hypothesis of his was that student ratings would produce changes in teachers who had rated themselves more favorably than their students had rated them. Research results generally supported his hypothesis.

McKeachie and Linn (1975) investigated the use of student ratings consultation feedback for instructional improvement. Their research design also consisted of two experimental faculty groups (consultation feedback of student ratings and printed feedback of student ratings) and one control faculty group (no feedback). Results indicated an enhanced positive effect of student ratings feedback.

General Research Design

The research design employed in this investigation was a quasi-experimental design. This design allowed the experimenter to combine the aspects of two feedback experimental groups, as found in McKeachie and Linn's (1975) study, and two control groups as found in Centra's (1973b) equilibrium hypothesis study.

The general research design used in this research had a total of four instructor groups (G1, G2, G3, and G4). Two of the four were experimental groups which received different forms of mid-term student ratings feedback (G1 and G2). As indicated in Table 1, the other two groups were control groups which received no mid-term student ratings feedback (G3 and G4). All four groups consisted of two levels for each group: instructors of long-term courses and instructors of short-term courses. Long-term courses were 14-week credit courses taught by part-time faculty in the Weekend College Division at Saint Leo College. Short-term courses were non-credit courses of six to eight weeks in duration taught by part-time faculty in the Division of Lifelong Learning, School of Extended Studies at the University of South Florida. All instructors participating in the study were randomly assigned to one of the four groups. The independent variable was mid-term student ratings feedback with two conditions: a full feedback condition (G1) consisting of printed feedback of the mid-term IDEA standard form summary report of student ratings with oral consultation and a partial feedback condition (G2) consisting of printed feedback only of mid-term IDEA standard form summary report of student ratings.

Table 1

General Research Design

GROUPS	TREATMENT	PRETEST	POSTTEST
G1 :	Full feedback	X	X
G2 :	Partial feedback	X	X
G3 :	No feedback (pretest and posttest only)	X	X
G4 :	No feedback (posttest only)		X

Another factor incorporated into the research design was instructor self-evaluation. In G1, G2, and G3 instructor self-evaluation data from the IDEA standard form were collected at mid-term (pretest) and end-of-term (posttest). Instructor self-evaluation data in control G4 were collected at the end-of-term only (posttest). The data collection of student ratings and instructor self-ratings of instruction at the end of the term in control G4 was to determine whether mid-term ratings had a sensitizing effect on student raters or instructors.

Instructor demographic characteristics regarding sex, teaching experience, and educational degree obtained were collected by the investigator prior to the beginning of the study. These data were collected to investigate whether there was any relationship between instructor characteristics and student ratings of teaching behavior. The instructor demographic information is presented in Table 2. As indicated, there was similar demographic distribution among the four treatment groups involved in the study. Teaching experience and educational degree obtained for one instructor in group 4 were not available to the

Table 2

Frequency and Percentage Distribution of Selected Instructor Demographic Variables

VARIABLES	<u>GROUPS</u>			
	G1 (n=24) FREQ. %	G2 (n=23) FREQ. %	G3 (n=23) FREQ. %	G4 (n=24) FREQ. %
<u>Sex</u>				
Male	14 (15%)	17 (18%)	12 (13%)	15 (16%)
Female	10 (11%)	6 (6%)	11 (11%)	9 (10%)
<u>Teaching Exp.*</u>				
0-3 yrs.	5 (6%)	3 (3%)	2 (2%)	4 (4%)
4-9 yrs.	8 (9%)	12 (13%)	6 (6%)	7 (8%)
10-14 yrs.	4 (4%)	4 (4%)	6 (6%)	3 (3%)
15+ yrs.	7 (8%)	4 (4%)	9 (10%)	9 (10%)
<u>Educ. Degree*</u>				
Bachelor's	2 (2%)	3 (3%)	3 (3%)	1 (1%)
Master's	17 (19%)	13 (14%)	13 (14%)	14 (16%)
Doctorate	5 (5%)	7 (7%)	7 (7%)	8 (9%)

*The category data for one instructor in G4 were not available.

searcher. Of the total number of 94 instructors participating in the study, 62% were male and 38% were female, for an approximate 2 to 1 ratio. Table 2 also shows the distribution regarding teaching experience. Fifteen percent claimed 0-3 years teaching experience, 36% reported 4-9 years experience, while 17% and 32% of the instructors claimed 10-14 years and over 15 years experience, respectively. The percentage of instructors reporting a bachelor's degree was 9%, while an overwhelming majority of 63% held a master's degree, and 28% held a doctorate degree.

Instrumentation

Centra (1973a) demonstrated that a descriptive evaluation instrument allows the recipient to judge the responses to items received by the evaluators. Descriptive feedback has been shown by researchers to be less threatening to the recipient and more informative than judgmental feedback (Harari & Zedeck, 1973). Other researchers showed that items of inclusion on the instrument need to be aspects of behavior over which the recipient has control, specific behaviors rather than global descriptions or personality characteristics, low inference rather than high inference items, and items relevant to the specific teaching situation (Braunstein et al. 1973; Cook, 1979; Glassman, Killiat, & Gmelch, 1974).

The student ratings of instruction instrument was central to the study in measuring the perceptions of students regarding the teaching effectiveness of part-time instructors and of the instructors' self-perception of their own teaching performance. In a critical review of college teaching improvement utilizing student feedback research, Levinson-Rose and Menges (1981) concluded that the clearest findings were from those studies which utilized discrepancies between instructors' self-ratings and ratings by students.

The instrument utilized in this study was the standard form of the Instructional Development and Effectiveness Assessment (IDEA) (Kansas State University, 1975). The IDEA evaluation form was first developed by Donald Hoyt in 1968 at Kansas State University (Hoyt, 1973). It became widely used in Kansas and available since 1975 to college instructors outside Kansas State University (Hoyt & Cashin, 1977).

The standard form of the IDEA survey instrument contains 39 items (see Appendixes A and B). The basis upon which the IDEA standard form was developed is that effective teaching is reflected by students' progress toward certain course goals. Therefore, 10 of the 39 items on the standard form are course learning objectives which the instructor is asked to rank order in terms of priority. As shown in Table 3, these 10 course learning objectives (items 21-30) are contained in Part I (Progress Ratings) of the IDEA summary report and form the basis for evaluating effective teaching. This section of the report is divided into three sub-categories: subject matter mastery, development of general skills, and personal development.

Table 3
IDEA Course Learning Objective Items

ITEM	CATEGORY
Part I. Evaluation (Progress Ratings)	
<u>Subject Matter Mastery</u>	
21.	Factual Knowledge
22.	Principles and Theories
24.	Professional Skills and Viewpoints
25.	Discipline's Methods
<u>Development of General Skills</u>	
23.	Thinking and Problem Solving
26.	Creative Capacities
29.	Effective Communication
<u>Personal Development</u>	
27.	Personal Responsibility
28.	General Liberal Education
30.	Implications for Self-Understanding
Overall Evaluation (Progress on Relevant Objectives)	

Item reliabilities and standard errors of measurement for the IDEA form were obtained by Cashin and Perrin (1978) for three class sizes: small, medium, and large. Samples of 200 or more classes were obtained by taking all small classes with 10 raters, all medium classes with 20 raters, and all large classes with 39, 40, or 41 raters. Each class was split in half and Spearman-Brown corrections were applied (see Appendix C). An average item reliability of .69 was obtained for 10 raters, .81 for 20, and .89 for 40.

In developing the IDEA standard rating form, the standard errors of measurement for the 39 items on the IDEA survey form were also calculated for three class sizes: small, medium, and large. The average standard error of measurement for small classes was .37, .25 for medium classes, and .18 for large classes (Cashin & Perrin, 1978).

Validity of the IDEA evaluation system has been established with a data pool of over 23,000 classes. From this pool a data base for all courses having utilized the IDEA system and courses similar in motivation level and class size has been established for evaluative comparison purposes. Correlation tables relating specific student progress to variable and specific teacher activities (called "methods") are stored in a computer and compare student ratings of the IDEA system to three kinds of data: (a) direct measures of student learning, (b) ratings by others (than students), and (c) possible sources of bias (Aubrecht, 1979).

This instrument was modified by the researcher to complement the specific data-gathering time frames; i.e., the mid-term (pretest) IDEA evaluation form items were stated in the present tense (see Appendix A),

while the final (posttest) IDEA evaluation form remained unchanged utilizing the past tense (see Appendix B). In addition, two extra global items were included in the evaluation form to assess the students' overall evaluation of the instructor and the course (see Appendixes A and B). The additional two global items were not part of the IDEA data pool and, therefore, did not affect the instrument's overall validity and reliability ratings.

A five-item Instructor Questionnaire with a five-point Likert-type response scale was developed by the researcher to assess instructor opinions towards student ratings of instruction (see Appendix D). The five items were used to find out how much an instructor felt the institution valued student opinions (items 1-2) and how much he/she valued student opinions of instruction (items 3-5). The questionnaire was sent to all instructors participating in this study prior to the starting date of their class along with a cover memo (see Appendix E).

Instructor information regarding the sex, teaching experience, and educational degree obtained of the study participants was gathered by the researcher prior to random assignment and treatment group level.

Pilot Study

The investigator conducted a pilot study to determine the suitability of the five-item Instructor Questionnaire and the feasibility of using the Instructional Development and Effectiveness Assessment (IDEA) standard form (Kansas State University, 1975).

The pilot sample consisted of a total of eight part-time faculty members from the School of Extended Studies at the University of South Florida teaching short-term courses. These faculty members were ran-

domly selected and not included in the full study. Each subject was randomly assigned to one of four treatment groups, and the IDEA evaluation form was administered during the fall semester, 1985. As a result of the pilot administration, the IDEA standard form was modified to reflect the specific data gathering time frame. As indicated in Appendixes A and B, the mid-term evaluation form items were stated in the present tense, while the end-of-term form was stated in the past tense. The pilot study also allowed the researcher to measure the amount of time necessary to receive the computerized printed summary reports from the Center for Faculty Evaluation and Development, Kansas State University. As a result, steps were taken in consultation with the Center to minimize the time necessary to receive the reports.

A training program regarding uniform directions for IDEA administration was developed by the researcher. Additionally, the oral consultation format regarding score interpretation and comparative data feedback utilized in the full study was also developed (see Appendix F). Both the evaluation administration training and oral consultation format were piloted during this time with the research assistants.

Present Study

Subjects

The study sample consisted of a total of 94 part-time faculty from two different post-secondary institutions in Florida. Forty-one of the total participants were part-time instructors of long-term, credit courses contracted to teach one or two Weekend College courses in the Educational Services Division of Saint Leo College. Of the 43 part-time instructors informed of the research study at Saint Leo, two declined to

participate, representing a 95% participation rate for this institution. The other 53 of the participants were University of South Florida, part-time instructors listed in the Lifelong Learning Catalogue of Non-Credit Courses, spring semester, 1986, who were teaching a course six to eight weeks in duration (short-term courses). All part-time faculty in the Division of Lifelong Learning (54 total) elected to participate in the study. However, one instructor suffered ill health during the third week of classes and was replaced by a substitute instructor for the remainder of the course. His student ratings and self-ratings data were warranted unusable. Therefore, a total of 164 evaluation of instruction measurements and 164 instructor, self-evaluation measurements were analyzed in the study. The total number of students enrolled in long-term courses was 649 and in short-term courses it was 897 for a total of 1,546. The total number of students rating in this study was 1,017 or 66%. Each instructor was randomly assigned to one of four treatment groups by utilizing a table of random numbers.

Data Collection

The research was conducted during the spring semester, 1986. During this time, data consisting of instructor information, instructor opinion of student ratings, student ratings, and instructor pretest and posttest self-evaluation of instruction ratings were collected. All data were collected by either the researcher or her two assistants. The researcher, who was also employed as a program coordinator at the University of South Florida's Division of Lifelong Learning, gave the mid-term student ratings feedback to all instructors assigned to this treatment condition. The five-item Instructor Questionnaire that was

developed by the investigator was sent to each instructor participating in this study as part of their spring semester course assignment letters. It was accompanied by a memorandum from the Director of Lifelong Learning (to instructors of short-term courses) and a letter from the researcher (to instructors of long-term courses) indicating instructions for completion and deadlines for return (see Appendix E). In both cases the questionnaire's value to the institution was emphasized as an important part of a research study on student ratings, which the division or college was participating in during the semester. The questionnaire was completed approximately two weeks prior to the beginning date of each course.

During the first week of classes, a detailed letter from the Director of the Division of Lifelong Learning (for short-term course instructors) and the Dean of Educational Services of Saint Leo College (for instructors of long-term courses) was sent concerning the division's or college's participation in an important research study exploring what students are able to evaluate in the classroom and how useful this information might be to the instructor (see Appendix G). These letters emphasized the study's importance to the respective institution and the desire for all instructors to participate. It also explained that a new student evaluation form would be utilized and that the course coordinator/researcher would be responsible for the administration of the form. Most classes had this form administered twice; once at mid-term and again at end-of-term.

During the second and third week of classes, each instructor teaching a short-term course assigned to feedback groups 1 and 2 and no-

feedback group 3 was contacted by the course coordinator/researcher and informed of the mid-term student ratings administration scheduled for the following class meeting. The researcher or one of her assistants administered and collected the IDEA standard form at the beginning of the third or fourth class meeting from all students present. The administrator read a statement stressing the importance of the evaluation and its purpose. All students were encouraged to participate and complete all 41 items on the evaluation to the best of their ability (see Appendix H). The instructor was directed to go to another classroom during the administration of the instrument and complete the same IDEA standard form rating his/her own teaching behavior as he/she believed the students would rate him/her and themselves thus far in the term (see Appendix I). The instructor was asked to prioritize instructional objectives for his/her course utilizing the IDEA instructor form prior to the mid-term evaluation (see Appendix J).

The IDEA standard form was again administered at the beginning of the sixth, seventh, or eighth class meeting to all students present in all short-term courses participating in this study (both feedback and no-feedback groups). The instructor was directed again to go to another classroom during the administration of the instrument and asked to complete the same IDEA standard form rating his/her own teaching behavior as he/she believed the students would rate him/her (see Appendix I).

During the mid-term (pretest) and final (posttest) administration of the IDEA form, the students were asked to code their response cards with the last four digits of their social security numbers. It was explained that this was for research coding purposes only, and that the

instructor would not see individual response cards, but only the total computer summary of the student response cards. The researcher utilized this procedure to reduce the possibility that any observed instructional change was due to possible attrition of low student raters occurring between the mid and final evaluation intervals (see Appendix H).

The same procedure was followed for each instructor teaching long-term courses. However, the researcher contacted each instructor and administered the mid-term student ratings form at the beginning of the seventh class meeting to all students present, and at the fourteenth class meeting to all students present for the end-of-term ratings. During each administration, the instructor was directed to go to another classroom during the administration of the instrument and complete the same form rating his/her own teaching behavior as he/she believed the students would rate him/her (see Appendix I). Again, the instructor was asked to prioritize instructional objectives for his/her course utilizing the IDEA instructor form prior to the mid-term evaluation (see Appendix J).

If less than 50% of the total enrolled students were present at the last class meeting (sixth, seventh, or eighth class meeting for short-term courses; fourteenth for long-term courses) an IDEA evaluation form and a self-addressed envelope was sent to the absent students to fill out and return. This was accompanied by a memo from the coordinator/researcher (to short- and long-term term course students) explaining the importance of the students' evaluation of the instructor and course (see Appendix K).

Both instructors teaching short-term and long-term courses assigned to full feedback group, group 1 (printed feedback with oral consultation) received an appointment date for a consultation with the course coordinator/researcher within one week to 10 days after the student ratings evaluation administration. During the approximately 30 minute oral consultation period, the computer-printed summary of the students' rating of instruction was interpreted and explained. The individual instructor's self-rating in comparison to student feedback also was presented, explained, and interpreted (see Appendix L). Included in the IDEA summary report were such statistics as the mean for each item, standard deviation, percentage of students in class responding, and student ratings on course goals as compared to similar classes (see Appendix L). Suggestions for possible improvement were made where applicable, and a paper regarding effective teaching techniques and the learning characteristics of adult students was given to the instructor (see Appendix M).

Instructors assigned to the partial feedback group, group 2 (printed feedback only, no consultation), received (via mail) within one week to 10 days after the mid-term student ratings administration, a computer summary of the IDEA evaluation, a comparison to the individual instructor's self-rating on the same items (see Appendix L), and a paper describing the learning characteristics of adult students (see Appendix M) accompanied by a cover memo from the researcher (see Appendix N). Standard interpretation instructions were provided on the back of the IDEA summary form (see Appendix L). Included in the report were the mean for each item, standard deviation, percentage of students in class

responding, and student ratings data comparison to similar classes on course goals (see Appendix L).

Instructors assigned to no-feedback groups 3 and 4 did not receive any printed or oral mid-term or end-of-term student feedback summaries prior to the end of this study.

Data Analysis

The dependent variables in the study were the posttest measures of student ratings of instruction and the posttest measure of instructor self-ratings. The independent variable was the type of student ratings feedback received.

Data on the instructor's sex, teaching experience, and educational degrees obtained were coded into the statistical analysis utilizing a one-way analysis of variance to determine if there was any relationship between these variables and student ratings of part-time instruction.

The IDEA standard form's basis for evaluating effective teaching is dependent upon how students rate their progress on 10 course learning objectives, each of which is ranked by the course instructor as either essential, important, or of minor importance to his/her teaching. These ratings are reflected on the first 10 course objective items (item 21 through 30) contained in Part I Evaluation (Progress Ratings) of the IDEA summary report (see Appendix L). An additional overall evaluation score is indicated at the bottom of Part I. Although no numbers are reported, a verbal rating is given based upon the weighted average of a set of T-scores. Objectives which the instructor considered essential are given double weights; important objectives are given single weights; all other objectives are given zero weights and are dropped from the

calculations. For purpose of analysis, the researcher assigned numerical weights to the verbal T-scores on a 1-5 basis with 1 being the lowest score and 5 being the highest score.

The following directional and null hypotheses were investigated:

Hypothesis 1. Part-time faculty who receive printed summary feedback along with oral consultation about their mid-term student ratings will receive higher end-of-term student ratings than part-time faculty who receive only printed summary feedback of mid-term student ratings, and part-time faculty who receive only printed summary feedback of mid-term student ratings will receive higher end-of-term student ratings than part-time faculty who do not receive mid-term student ratings feedback.

End-of-term student rating means of the 10 course learning objective items of Part I Evaluation (Progress Ratings) and the overall evaluation T-score of the IDEA standard form were examined utilizing a one-way analysis of variance to test for Hypothesis 1. Multiple pairwise comparisons were performed using Fisher's Least Squared Difference procedure to identify specific group differences of each of the 10 course learning objective item means and the overall evaluation T-score, if significant differences were indicated (.05 level) by the global Anova. Since Hypothesis 1 was directional, a one-tailed test of Fisher's LSD procedure was used. To test for sensitivity effects of pretesting on both the posttest student ratings and the instructor self-ratings, additional analyses of variance were conducted.

Hypothesis 2. Part-time faculty assigned to both the mid-term feedback and no-feedback groups whose self-ratings of instruction are

higher than their students' ratings of instruction at mid-term will receive higher end-of-term student ratings than part-time faculty whose self-ratings of instruction are equal to or lower than their students' ratings of instruction at mid-term.

A linear regression model was used on each of the 10 course learning objective item means of the student ratings and instructor self-ratings to calculate a regression weight. This statistical analysis is similar to the regression formula found in Centra's (1973b) study which was based on equilibrium theory and which showed the relationship between instructor self-ratings to be linear. Centra showed that instructors who rated themselves higher than their students rated them (overraters) and who showed a greater discrepancy (received feedback) also showed the greater likelihood of improvement on subsequent student ratings. The regression equation employed with the feedback and no-feedback groups was $R_2 = a_1 + b_1 R_1$ and $c(1-R_1)$ where R_2 is the predicted end-of-term rating; thus, $1-R_1$ is the difference between the instructor self-rating and the mid-term rating. A statistically supported hypothesis would show a significant difference between the regression weights for $1-R$ (i.e. c) for the feedback and no-feedback groups, with c for the feedback groups being positive and greater. Forty regression weights were calculated and analyzed for differences utilizing a t-statistic on the paired regression weights. A total of 20 t-statistics were then subsequently analyzed for differences utilizing a one-tailed test.

Hypothesis 3. Part-time faculty assigned to both the mid-term feedback and no-feedback groups whose self-ratings of instruction are

higher than their students' ratings of instruction at mid-term will lower their end-of-term self-ratings of instruction.

Hypothesis 4. Part-time faculty assigned to both the mid-term feedback and no-feedback groups whose self-ratings of instruction were equal to or lower than their students' ratings of instruction at mid-term will raise their end-of-term self-ratings of instruction.

Hypotheses 3 and 4 investigated the effect instructor self-overrating and underrating at mid-term had on final instructor self-ratings. A correlated t-test was utilized to test these hypotheses on the 10 course learning objective item means. Since Hypotheses 3 and 4 were directional, a one-tailed test of the hypotheses was used.

Hypothesis 5. Part-time faculty teaching long-term courses who receive mid-term student ratings feedback will receive higher end-of-term student ratings than part-time faculty teaching short-term courses who receive mid-term student ratings feedback.

End-of-term student ratings means of the 10 course learning objective items of Part I Evaluation (Progress Ratings) and the overall evaluation T-score of the IDEA standard form were examined utilizing a one-way analysis of variance to test for Hypothesis 5.

Hypothesis 6. There is no significant difference between the opinions of part-time faculty teaching long-term courses and part-time faculty teaching short-term courses towards student ratings of instruction.

A two-tailed related samples t-statistical analysis was used to test for differences between instructor opinions towards student ratings of instruction in Hypothesis 6.

An alpha level of .05 was used in each case to test the six hypotheses.

Finally, a one-way Anova was used to test for differences with the three instructor demographic variables on the 10 course learning objective items and the overall evaluation T-score at the .05 level. Tukey's method was used to test at the .05 level for within group differences for each item means that indicated a significant F value.

Summary of the Chapter

This chapter contains the methodological procedures used in this investigation. The student ratings instrument was described and validity and reliability information provided. The five-item Instructor Questionnaire was also described. Finally, this chapter contains a description of subjects, data collection, and data analysis techniques.

CHAPTER FOUR

FINDINGS

The primary purpose of this study was to determine the effect different forms of student ratings feedback had on subsequent part-time faculty student ratings and instructor self-ratings. Part-time faculty opinions towards student ratings of instruction also were explored.

This chapter contains the results of the study. First, the results pertaining to each of the six hypotheses under investigation are described in terms of either treatment condition or instructor level (short-term versus long-term courses) with reference to both dependent variables, posttest measures of student ratings of instruction, and the posttest measures of instructor self-ratings. Then the post hoc analyses of the instructor demographic variables of the subjects and student motivation levels are presented and discussed.

The study's research design combined aspects of two feedback experimental groups as found in McKeachie and Linn's (1975) augmented feedback study and two no-feedback control groups as found in Centra's (1973b) equilibrium hypothesis study.

The researcher pilot tested the instructional assessment instrument, IDEA standard form with its 41 items (39 standard items and 2 additional items), and the five-item Instructor Questionnaire on eight instructors teaching short-term courses at the University of South Florida during the fall semester, 1985.

The research involved 165 mid-term and final evaluation of instruction measurements and 165 mid-term and final self-evaluation measurements that were collected for the study. Of the total population, two instructors from Saint Leo College elected not to participate, while all of the part-time instructors from the Division of Lifelong Learning at the University of South Florida participated in the study for a total of 95 instructors in the sample. One University of South Florida instructor teaching a short-term course became critically ill and was replaced with a substitute instructor to teach the remainder of the course. His mid-term evaluation measurements were, therefore, warranted unusable. Therefore, the study sample ultimately consisted of 94 part-time instructors representing 97% of the total population. This resulted in a total of 164 evaluation of instruction measurements and 164 instructor self-evaluation measurements analyzed in the study.

Two different measurements were used for the dependent variables. The first dependent variable was the posttest measure of student ratings of instruction. The second dependent variable was the posttest measure of instructor self-ratings. These two variables were determined by the ratings given to 10 course learning objective items and the overall evaluation T-score of the IDEA standard form by all students present at the last class meeting in all courses involved in this study. Instructor self-ratings of teaching behavior on the same 10 course learning objective items were also collected at the last class meeting from all instructors involved in the study. There was no overall self-ratings score collected since this score is a weighted T-score generated by the computer, and the instructor self-ratings were not computer scored.

Therefore, two different dependent variables were independently measured and analyzed: (a) student ratings of instruction and (b) instructor self-ratings of instruction.

The original intent of this study was to test six hypotheses on the total sample of 94 subjects. The purpose of the study was to determine the effect different forms of student ratings feedback had on subsequent part-time faculty student ratings and instructor self-ratings. Additional considerations of interest developed, specifically, differences between motivation levels of students enrolled in credit and non-credit courses and instructor demographic variables. Because of these concerns, post hoc analyses were performed to measure the differences in motivation levels and the instructor demographic variables. Class motivation levels between students enrolled in long-term, credit and short-term, non-credit courses was determined by the mean class score indicated by item 36 of the IDEA summary report (see Appendix L).

Descriptive Analysis

A subprogram of the Statistical Analysis System, version 5.08 (SAS, 1984) computer program was used to calculate the Anova, Fisher's LSD procedure, t-statistic, Tukey's comparisons, and regression weights of the linear regression model. A special computer program was written to calculate the t-statistic of the regression weights in the linear regression model utilized for Hypothesis 2.

Test of Hypothesis 1

Hypothesis 1. Part-time faculty who receive printed summary feedback along with oral consultation about their mid-term student ratings will receive higher end-of-term student ratings than part-time faculty

who receive only printed summary feedback of mid-term student ratings, and part-time faculty who receive only printed summary feedback of mid-term student ratings will receive higher end-of-term student ratings than part-time faculty who do not receive mid-term student ratings feedback.

The overall Anova performed on each of the 10 course learning objective variables and the overall evaluation T-score revealed that there were significant differences at the .05 level among the four sets of population means on five course learning objective items. The overall evaluation T-score showed no significant differences. The five course learning objective items which showed significant differences consisted of the four items related to the subject matter mastery category and one item in the development of general skills category (see Table 4). Of the items found significant at the .05 level in the subject matter mastery learning objective category, item 21 (factual knowledge) had an F value of 4.11, item 22 (principles and theories) had an F value of 4.95, item 24 (professional skills and viewpoints) had an F value of 3.66, and item 25 (discipline's methods) had an F value of 2.81. The other item showing a significant difference with an F value of 3.66 was item 26 (creative capacities), which is related to the development of general skills category (see Appendix O for summary of all Anovas).

Further analysis, which utilized Fisher's LSD method for planned pairwise comparisons, indicated additional significant differences between treatment groups at the .05 level of significance utilizing a one-tailed test. Analysis of item 21, factual knowledge, revealed specific significant differences at the .05 level between the means of both feed-

Table 4

Results of the Comparisons of Means and Standard Deviations of Full Feedback, Partial Feedback, and No-Feedback Groups

ITEM	FULL FEEDBACK ($\bar{n}=24$) MEAN S.D.	PARTIAL FEEDBACK ($\bar{n}=23$) MEAN S.D.	NO-FEEDBACK (PRETEST & POSTTEST) ($\bar{n}=23$) MEAN S.D.	NO-FEEDBACK (POSTTEST) ($\bar{n}=24$) MEAN S.D.
<u>Subject Matter Mastery</u>				
21. Fact. Know.	3.90 .510	3.97 .474	3.70 .548	3.49 .551
22. Princ. & Theo.	3.88 .463	4.03 .370	3.78 .593	3.52 .450
24. Prof. Skills & Viewpts.	3.85 .561	3.79 .577	3.63 .667	3.30 .686
25. Disc. Methods	3.59 .677	3.75 .644	3.35 .713	3.23 .707
<u>Development of General Skills</u>				
23. Think & Prob.	3.95 .604	3.86 .429	3.79 .590	3.62 .651
26. Creative Cap.	3.63 .636	3.75 .642	3.62 .676	3.18 .572
29. Effec. Comm.	3.38 .846	3.45 .797	3.50 .933	3.16 .915
<u>Personal Development</u>				
27. Pers. Respon.	3.80 .562	3.77 .638	3.74 .729	3.44 .622
28. Gen. Lib. Ed	3.12 .871	3.43 .652	3.21 .847	2.83 .656
30. Implic. for Self Undersg.	3.68 .638	3.69 .551	3.59 .724	3.31 .866
Overall Score	3.13 1.154	3.61 .988	3.08 1.248	2.83 1.150

back groups, full feedback group (group 1) and partial feedback group (group 2), and the end-of-term (posttest) means of the no-feedback posttest only group (group 4) and between the means of the partial feedback group (group 2) and the no-feedback pretest and posttest group (group 3). The LSD statistic for the full feedback group (group 1) was .413, and the MSE for the paired comparisons was equal to .273, while the degrees of freedom equaled 90. The LSD for the partial feedback group (group 2) was .482 and for the no-feedback pretest and posttest group (group 3) it was .274. There was no significant difference indicated at the .05 level between the two no-feedback groups, the no-feedback pretest and posttest group (group 3) and no-feedback posttest only group (group 4).

Further analysis of item 22 (principles and theories) showed the end-of-term (posttest) item means of the full feedback group (group 1), the partial feedback group (group 2), and the no-feedback pretest and posttest group (group 3) significantly different at the .05 level from the end-of-term (posttest) means of the no-feedback posttest only group (group 4). The MSE for the paired comparisons was .226 and the degrees of freedom was 90. The LSD for the full feedback group (group 1) was .363, for the partial feedback group (group 2) it was .518, and for the no-feedback pretest and posttest group (group 3) it was .262. Another paired item comparison significantly different at the .05 level occurred between the no-feedback pretest and posttest group (group 3) and the no-feedback posttest only group (group 4). The MSE for the paired comparison was .226, degrees of freedom was 90, and the LSD for group 3 was .262. Fisher's LSD procedure on item 24 (professional skills and

viewpoints) showed a significant difference at the .05 level on the end-of-term (posttest) means of the full feedback group (group 1), partial feedback group (group 2), and no-feedback pretest and posttest only group (group 3) and the no-feedback posttest only group (group 4). The MSE for the paired comparisons was .391 and the degrees of freedom equaled 90. The LSD value for the full feedback group (group 1) was .546, the LSD statistic for the partial feedback group (group 2) was .487, and the LSD for the no-feedback pretest and posttest group (group 3) was .326. The last item related to subject matter mastery which showed significant differences among the four sets of population end-of-term student ratings means was item 25, discipline's methods. The Fisher LSD analysis on this item's group means indicated a significant difference at the .05 level between the end-of-term (posttest) student ratings means of the full feedback group (group 1) and the partial feedback group (group 2) and the no-feedback posttest only group (group 4). Additionally, the difference between the partial feedback group (group 2) and the no-feedback pretest and posttest group (group 3) was found significant at the .05 level. The MSE for the paired comparisons equaled .470 and the degrees of freedom was equal to 90. The LSD statistic for the full feedback group (group 1) was .367. The LSD value for the partial feedback group (group 2) compared to the no-feedback pretest and posttest group (group 3) was .404, while it was .527 for the no-feedback posttest only group (group 4) comparison.

Further analysis utilizing Fisher's LSD procedure on the end-of-term (posttest) student ratings means of item 26 (creative capacities) indicated significant differences between the full feedback group (group

1), partial feedback group (group 2), no-feedback pretest and posttest group (group 3) and the no-feedback posttest only group (group 4) at the .05 level of significance. The MSE was .399 and the degrees of freedom was 90. The LSD statistic for the full feedback group (group 1) was .446, for the partial feedback group (group 2) it was .565, and for the no-feedback mid-term and posttest group (group 3) it was .438.

Fisher's LSD procedure results indicated no significant differences on the 11 items between the no-feedback pretest and posttest group (group 3) and the posttest only group (group 4). Therefore, the mid-term evaluation procedure did not seem to have had any sensitizing effects on the end-of-term student ratings.

Because of the overall Anova and follow-up findings, an additional analysis was used by the researcher to test for differences between the means of the mid-term (pretest) student ratings and the end-of-term (posttest) student ratings within three of the four treatment groups (groups 1, 2, and 3). A related samples t-test of paired comparisons was utilized to test for differences of pretest and posttest means within the full feedback group (group 1), partial feedback group (group 2), and no-feedback pretest and posttest group (group 3). A one-tailed test for differences was used. There was no analysis for the no-feedback posttest only group (group 4) since this group's treatment consisted of an end-of-term (posttest) only assessment. The results of the analysis are presented in Table 5. As indicated in Table 5, the full feedback group (group 1) showed significant differences at the .05 level between the mid-term (pretest) student ratings means as compared to the end-of-term (posttest) student ratings means on 6 of the 10 course

Table 5

Results of Paired Comparisons of the Pretest and Posttest Means and Standard Deviations for Full Feedback, Partial Feedback, and No-Feedback Groups

ITEM	FULL FEEDBACK (n=24)				PARTIAL FEEDBACK (n=23)				NO-FEEDBACK (PRETEST & POSTTEST) (n=23)			
	PRETEST	MEAN	S.D.	POSTTEST	PRETEST	MEAN	S.D.	POSTTEST	PRETEST	MEAN	S.D.	POSTTEST
<u>Subject Matter Mastery</u>												
21. Fact. Knowl.	3.70	.420	*	3.90	.510	3.94	.433	3.97	.474	3.67	.673	3.70
22. Princ. & Theo.	3.76	.395		3.88	.463	3.97	.381	4.03	.370	3.80	.580	3.78
24. Prof. Skills & Viewpts	3.72	.479		3.85	.561	3.73	.565	3.79	.577	3.54	.758	3.63
25. Disc. Methods	3.52	.469		3.59	.677	3.59	.570	* 3.75	.644	3.32	.773	3.35
<u>Development of General Skills</u>												
23. Think. & Prob. Solving	3.66	.415	*	3.95	.604	3.73	.684	3.86	.429	3.72	.669	3.79
26. Creative Cap.	3.44	.551	*	3.63	.636	3.62	.559	3.75	.642	3.42	.711	3.62
29. Effic. Comm.	3.05	.848	*	3.38	.846	3.22	.910	3.45	.797	3.46	.851	3.50
<u>Personal Development</u>												
27. Pers. Respon.	3.54	.487	*	3.80	.562	3.60	.626	3.77	.638	3.62	.755	3.74
28. Gen. Lib. Ed.	3.07	.861		3.12	.871	3.30	.826	* 3.43	.652	3.30	.981	3.21
30. Implic. for Self Undersg.	3.40	.537	*	3.68	.638	3.42	.667	* 3.69	.551	3.68	.685	3.59
Overall Score	2.92	1.210		3.13	1.150	3.22	1.660	* 3.61	.988	3.00	1.500	3.08

p<.05 one-tailed test for differences between pretest and posttest means

learning objective items. These significant differences were found on item 21 (factual knowledge) with a t-statistic of 2.34, item 23 (problem solving) had a t-statistic of 2.65, item 26 (creative capacities) had a t-statistic of 1.84, and items 29 (effective communication), 27 (personal responsibility), and 30 (implications for self-understanding) had t-statistics of 2.60, 2.54, and 2.67, respectively. Each of the other four learning objective items, although not significant at the .05 level, revealed an increased end-of-term (posttest) student ratings mean. The overall evaluation T-score was found non-significant at the .05 level.

The partial feedback group (group 2) indicated a significant difference at the .05 level of significance between the mid-term (pretest) student ratings mean and the end-of-term (posttest) student ratings means on three course learning objective items. Item 25 (discipline's methods) had a t-statistic of 1.74, item 28 (general liberal education) had a t-statistic of 1.85, and item 30 (implications for self-understanding) had a t-statistic of 3.18. The other seven course learning objective items, although not significantly different at the .05 level, indicated higher end-of-term (posttest) student ratings means than mid-term (pretest) student ratings means. The overall evaluation T-score was found significant with a t-statistic of 1.74.

The t-test evaluation of the no-feedback pretest and posttest group (group 3) showed no significant differences between the student ratings means from mid-term (pretest) to end-of-term (posttest) on any of the 10 course learning objective items or the overall evaluation T-score. Seven of the learning objective items and the overall evaluation T-score

indicated higher or increased end-of-term (posttest) student ratings means, while three of the learning objective items indicated lower or decreased end-of-term (posttest) means.

The initial Anova performed by the researcher on the 10 course learning objective items and the overall evaluation T-score indicated only 5 out of 11 student ratings means significantly different at the .05 level of significance. Closer investigation of the between group differences of these significant items utilized Fisher's LSD method for follow-up pairwise comparisons. Only 15 learning course objective item means out of a possible 30 paired item means were found significant at the .05 level using a one-tailed test. Eleven of the 15 significant item means were those items related to subject matter mastery and belonging to the two feedback groups (groups 1 and 2). Even though 10 of the 15 pairwise comparisons of student ratings mean differences between treatment groups were found significant at the .05 level when the full feedback group (group 1) and the partial feedback group (group 2) were each compared to the no feedback posttest only group (group 4), this finding was judged not to be strong enough to support Hypothesis 1. Nor could the fact that 55 out of a possible 66 paired mean comparisons were in the predicted direction of the hypothesis be used as a basis for partially accepting Hypothesis 1. In fact, when the partial feedback group (group 2) was compared to the full feedback treatment group (group 1), 8 out of 11 individual item mean comparisons were not in the predicted direction of the hypothesis, suggesting that mid-term partial feedback (printed feedback) may be at least as effective as mid-term full feedback (printed feedback with oral consultation). The t-test for

related samples suggested that the greatest change in student ratings of instruction from mid-term (pretest) to final evaluation (posttest) occurred within the treatment group which received the full feedback (printed feedback with oral consultation). Comparison of mid-term (pretest) to final evaluation (posttest) means showed 6 out of 11 individual item means significantly different at the .05 level of significance. The remaining five item means for this group were in the predicted direction revealing increased final (posttest) student rating means.

Based on the above mentioned findings, the results did not appear to be strong enough to even partially support the hypothesis at the .05 level of significance. Therefore, Hypothesis 1 was rejected. However, the full feedback and partial feedback groups (groups 1 and 2) reported consistently higher subsequent student ratings than the two no-feedback groups (groups 3 and 4).

Test for Hypothesis 2

Hypothesis 2. Part-time faculty assigned to both the mid-term feedback and no-feedback groups whose self-ratings of instruction are higher than their students' ratings of instruction at mid-term will receive higher end-of-term student ratings than part-time faculty whose self-ratings are equal to or lower than their students' ratings of instruction at mid-term.

The statistical analysis utilized a linear regression model to calculate the regression weights of the 10 learning objective variables of instructor self-overrating and instructor self-underrating in the two feedback conditions and the no-feedback condition. No overall evalua-

tion T-score was generated by instructor self-ratings, and thus was not included in this analysis. Differences of the 40 regression weights between the feedback and no-feedback groups were tested using a correlated t-statistic and a one-tailed test of significance. Table 6 indicates the results of the t-tests performed to compare the regression weights for instructor self-underraters and overraters in the feedback and no-feedback conditions. Results for instructors who rated themselves less favorably at mid-term than their students rated them (self-underraters) indicated 3 items (items 27, 28, and 29) of the 10 items analyzed were significant at the .05 level for instructors who received feedback. Generally, the beta weights for instructor self-underraters showed fairly random differences. Two of the 10 learning objective items (items 27 and 30) of the instructor self-overraters in the feedback condition were significant at the .05 level. Four other items (items 24, 26, 29, and 28) showed beta weights of the instructor overraters in the feedback condition positive and greater than the beta weights of those in the no-feedback condition. Generally, overrating did not appear to be a valid predictor of end-of-term student ratings for part-time faculty, resulting in the rejection of Hypothesis 2.

Test of Hypothesis 3

Hypothesis 3. Part-time faculty assigned to both the mid-term feedback and no-feedback groups whose self-ratings of instruction are higher than their students' ratings of instruction at mid-term will lower their end-of-term self-ratings of instruction.

A correlated t-test analysis was performed to test the hypothesis at the .05 level of significance on the difference scores of instructors

Table 6

Results of the Comparisons of Regression Weights of Instructor Over-raters and Underraters in the Two Feedback Conditions

ITEM	FEEDBACK	<u>UNDERRATERS</u>		<u>OVERRATERS</u>	
		BETA WEIGHT (1-R)	t	BETA WEIGHT (1-R)	t
<u>Subject Matter Mastery</u>					
21. Fact. Knowl.	yes	-.038	.585	.018	-.203
	no	.019		.044	
22. Princ. & Theo.	yes	-.160	-.143	-.268	-.996
	no	-.274		.332	
24. Prof. Skills & Viewpoints	yes	.009	.068	.564	.739
	no	.002		.148	
25. Disc. Methods	yes	.063	-.756	.421	.120
	no	-.008		.512	
<u>Development of General Skills</u>					
23. Think. & Prob. Solving	yes	-.062	-.027	-.263	-.746
	no	-.058		.064	
26. Creative Cap.	yes	-.083	-1.188	.383	.649
	no	-.280		-.112	
29. Effec. Comm.	yes	-.015	-.424	.097	.992
	no	-.209		-.229	
<u>Personal Development</u>					
27. Pers. Respon.	yes	.095	-2.059*	.090	-1.796*
	no	-.294		.712	
28. Gen. Lib. Ed.	yes	-.094	1.729*	.206	1.071
	no	.298		-.080	
30. Implic. for Self Undersg.	yes	-.101	1.733*	-.136	-1.861*
	no	.205		.128	

*p<.05 one-tailed test for differences between beta weights

who self-overrated on the 10 learning objective item variables. Again, since instructor self-ratings were not computer scored, an overall evaluation T-score was not generated and thus was not available for use in this analysis. As indicated in Table 7, results showed a significant difference on 9 of the 10 learning objective item means in the predicted direction of the hypothesis (one-tailed test of significance). Although the other item mean was not found significant at the .05 level, it is worth noting that the direction of the difference was in the predicted direction of the hypothesis, leading the researcher to conclude that the hypothesis was generally supported. Therefore, part-time faculty who rated themselves higher than their students rated them at mid-term (pretest) tended to lower their end-of-term (posttest) self-ratings. This suggested that instructor self-rating may be related to increased instructor awareness of teaching behavior.

Test of Hypothesis 4

Hypothesis 4. Part-time faculty assigned to both the feedback and no-feedback groups whose self-ratings of instruction are equal to or lower than their students' ratings of instruction at mid-term will raise their end-of-term self-ratings of instruction.

A correlated t-test was used to test for differences (one-tailed test of significance). No overall evaluation T-score was generated in self-rating, and therefore was not available for this analysis. Six out of the 10 learning objective item differences tested indicated a significance at the .05 level (see Table 7). Although not found significant, it is important to note that the direction of the other four item mean differences were also in the prediction of the hypothesis. In

Table 7

Results of the Comparisons of Change Rates in Self-Ratings from Time A to Time B in Instructor Self-OVERRATERS and UNDERRATERS

ITEM	<u>OVERRATERS</u>		<u>UNDERRATERS</u>	
	t-statistic	DIR.	t-statistic	DIR.
<u>Subject Matter Mastery</u>				
21. Fact. Knowl.	-2.96*	A>B	2.82*	B>A
22. Princ. & Theo.	-3.74*	A>B	2.94*	B>A
24. Prof. Skills & Viewpoints	-1.70*	A>B	1.61	B>A
25. Disc. Methods	-1.75*	A>B	1.91*	B>A
<u>Development of General Skills</u>				
23. Think. & Prob. Solving	-2.40*	A>B	1.09	B>A
26. Creative Cap.	-.49	A>B	.43	B>A
29. Effec. Comm.	-2.86*	A>B	2.14*	B>A
<u>Personal Development</u>				
27. Pers. Respon.	-2.37*	A>B	2.44*	B>A
28. Gen. Lib. Ed.	-3.53*	A>B	1.60	B>A
30. Implic.for Self Undersg.	-3.07*	A>B	3.41*	B>A

*p<.05 one-tailed test for differences between instructor pretest and posttest self-ratings

other words, part-time faculty who tended to rate themselves equal to or lower than their students rated them at mid-term (pretest) rated themselves higher on the end-of-term (posttest) ratings. Therefore, the findings suggest that the hypothesis was partially supported.

Because of the findings of Hypotheses 3 and 4, the investigator continued the analysis to test whether the significant differences found were a result of instructor increased awareness of his/her own teaching behaviors or representative of a statistical phenomenon known as regression to the mean. It is common in some research areas to find differences in growth rates particularly when respondents self-select to receive treatment. The point in this test is that many patterns of selection-maturation should lead to increased within group variances at the end-of-term (posttest) when compared to the mid-term (pretest).

Table 8 shows the results of the Anova test that indicated the significant differences of within group variances in time B (posttest) was found for both overrater and underrater instructor groups. Items 22, 25, and 23 were found significantly different at the .05 level with respective F values of 1.90, 3.41, and 2.02 for instructor self-overraters. Item 26 had an F value of 1.63 which was significant at the .05 level for the self-underrater group of instructors. Therefore, a similar statistical regression for both groups was assumed, and it was concluded that no differential statistical regression occurred. In other words, the differences found with instructors who tended to self-overrate or underrate appeared to be a result of instructor increased awareness of his/her own teaching behavior rather than a statistical regression to the mean. This resulted in changed final (posttest) in

Table 8

Test for Differential Statistical Regression Comparisons of Within Group Variances at Times A and B for Both Instructor Self-Overturers and Underraters

ITEM	S2A	S2B	DIR.	F-VALUE	df
<u>Overturers</u>					
A-B 21.	.229	.360	B>A	1.57	33,35
A-B 22.	.254	.483	B>A	1.90*	31,33
A-B 24.	.307	1.188	B>A	3.88	25,24
A-B 25.	.332	1.133	B>A	3.41*	20,20
A-B 23.	.346	.699	B>A	2.02*	30,30
A-B 26.	.499	.519	B>A	1.04	25,26
A-B 29.	.677	1.256	B>A	1.85	28,28
A-B 27.	.377	.677	B>A	1.79	28,28
A-B 28.	.658	.862	B>A	1.31	20,21
A-B 30.	.534	.745	B>A	1.40	27,27
<u>Underraters</u>					
A-B 21.	.733	.850	B>A	1.16	57,31
A-B 22.	.529	.752	B>A	1.42	60,36
A-B 24.	.895	1.172	B>A	1.31	67,42
A-B 25.	1.137	1.795	B>A	1.58	69,43
A-B 23.	.644	.997	B>A	1.55	58,34
A-B 26.	.937	1.531	B>A	1.63*	66,41
A-B 29.	1.644	1.972	B>A	1.19	61,37
A-B 27.	.903	1.187	B>A	1.31	61,38
A-B 28.	1.401	1.768	B>A	1.26	70,46
A-B 30.	1.125	1.655	B>A	1.47	63,39

*p<.05

structor self-ratings which would more closely approximate the "reality" of student ratings of instruction.

Test for Hypothesis 5

Hypothesis 5. Part-time faculty teaching long-term courses who receive mid-term student ratings feedback will receive higher end-of-term student ratings than part-time faculty teaching short-term courses who receive mid-term student ratings feedback.

Results of the analyses of variance performed on the combined 10 learning objective item means and the overall evaluation T-score of the two feedback groups (groups 1 and 2) between instructor levels (long-term courses versus short-term courses) revealed no significant differences at the .05 level in the direction predicted by the hypothesis (see Table 9). As indicated in the Anova summary table (see Appendix P), there were fairly large F values for four item means that would have been significant if the prediction of the hypothesis had been in the opposite direction.

Results of the test of Hypothesis 5 seemed to indicate that the hypothesis was not supported in the predicted direction, and therefore, the hypothesis was rejected. Nine of the 11 item means showed higher end-of-term student ratings for part-time faculty teaching short-term, non-credit courses than for part-time faculty teaching long-term, credit courses. Findings suggest that the feedback condition may have had significant effects on subsequent student ratings of part-time instructors of short-term rather than long-term courses.

Table 9

Results of the Comparisons of the Means and Standard Deviations of Short-Term Course Versus Long-Term Course Instructors in the Feedback Condition

ITEM	SHORT-TERM (n=53)		LONG-TERM (n=41)		DIR.
	MEAN	S.D.	MEAN	S.D.	
<u>Subject Matter Mastery</u>					
21. Fact. Know.	4.10	.352	3.74	.564	S>L
22. Princ. & Theo.	4.06	.346	3.82	.478	S>L
23. Prof. Skills & Viewpoints	3.95	.571	3.65	.520	S>L
25. Disc. Methods	3.65	.720	3.69	.590	L>S
<u>Development of General Skills</u>					
23. Think. & Prob. Solving	4.05	.431	3.73	.581	S>L
26. Creative Cap.	3.76	.662	3.60	.602	S>L
29. Effec. Comm.	3.42	.955	3.40	.618	S>L
<u>Personal Development</u>					
27. Pers. Respon.	3.89	.652	3.66	.499	S>L
28. Gen. Lib. Ed.	3.38	.831	3.13	.704	S>L
30. Implic. for Self Undersg.	3.83	.604	3.50	.530	S>L
Overall score	3.19	1.003	3.60	1.191	L>S

Test of Hypothesis 6

Hypothesis 6. There is no significant difference between the opinions of part-time faculty teaching long-term and part-time faculty teaching short-term courses towards student ratings of instruction.

A comparison of the responses of the instructors of short-term courses and instructors of long-term courses to the five items on the Instructor Questionnaire was made utilizing a t-statistic. The questionnaire, developed by the researcher, was designed to assess the opinions of part-time instructors towards student ratings of instruction. The first two items, 1 and 2, were more informational in nature and measured how much importance instructors felt their respective institution currently placed and should place on student ratings evaluations. The other three items, 3, 4, and 5, were used to ask the instructor how important he/she personally felt student ratings of instruction were, and therefore, measured instructor opinions towards student ratings.

As presented in Table 10, the results indicated statistically significant differences at the .05 level (two-tailed test) on two of the three items measuring instructor opinions (items 3 and 5). Item 3 had a t-statistic of 2.20 and asked the instructor how much weight should be given by student evaluation of instruction to his/her overall evaluation as an instructor. The direction of the difference showed that more instructors of short-term courses weighted this item more importantly than did instructors of long-term courses. Item 5 of the questionnaire asked instructors how much importance he/she placed on knowing how satisfied students were with his/her teaching and had a t-statistic of 2.76.

Table 10

Results of the Comparisons of the Means and Standard Deviations of the Instructor Questionnaire (Long-Term Versus Short-Term)

ITEM	SHORT-TERM ($n=53$)			LONG-TERM ($n=41$)		DIR.
	MEAN	S.D.		MEAN	S.D.	
1. Import. to Org.	3.57	1.140		3.48	1.040	S>L
2. Import. Should	3.84	.857		3.81	.943	S>L
3. Weight in Eval.	3.96	.790	*	3.54	1.030	S>L
4. Usefulness of Results	3.96	.970		3.60	1.110	S>L
5. Import. to Teaching	4.81	.445	*	4.43	.860	S>L

* $p < .05$ two-tailed test

Again, instructors of short-term courses rated this item of more importance than instructors of long-term courses. The other item means (items 1, 2, and 4), although not significant, indicated instructors of short-term courses rated these items higher than did the instructors of long-term courses. Based on the above mentioned findings, the results seemed to suggest that Hypothesis 6 be rejected. Therefore, part-time instructors teaching short-term, non-credit courses seemed to have valued student ratings of instruction more than instructors of long-term, credit courses.

Post Hoc Analyses

A one-way analysis of variance was used on the end-of-term (posttest) student ratings of the 10 learning objective item means and

the overall evaluation T-score of the IDEA standard form to analyze the instructor demographic information regarding sex, educational degree obtained, and teaching experience. In the analysis of the instructor sex variable, only one item was found significant at the .05 level. On this item (item 27, personal responsibility), female instructors received a higher end-of-term rating than did male instructors. The remaining 10 item variables analyzed showed no significant differences between the student ratings of male and female instructors. The one-way Anova performed on the 10 learning objective item means and the overall evaluation T-score regarding the instructor variable of educational degree obtained revealed no significant differences among the three educational groups: bachelor's degree, master's degree, and doctorate. The Anova applied to the end-of-term (posttest) student ratings of the 10 learning objective item means and the overall evaluation T-score regarding teaching experience showed significant differences at the .05 level on 6 of the 10 learning objective item means (items 21, 22, 23, 26, 27, and 30). The overall T-score was also significant at the .05 level (see Table 11). These significant differences were nearly equally distributed among the three category groups of items (subject matter mastery, general skills, and personal development). Follow-up analysis for those items indicating a significant F value was conducted utilizing Tukey's method to test for between group differences. Overall, Tukey's method revealed that students rated instructors with the least amount of experience, group 1 (0-3 years), lower on each of the six significant item variables than the other three teaching experience groups, [group 2 (4-9 years), group 3 (10-14 years), and group 4 (15+ years)] at the .05

Table 11

Tukey's Test for Between Group Differences on Instructor
Experience Variable

ITEM	F-VALUE	df	TUKEY'S DIFF. BY GROUP
<u>Subject Matter Mastery</u>			
21. Fact. Know.	6.51**	3,89	1< 2,3,4
22. Princ. & Theo.	8.71**	3,89	1< 2,3,4
24. Prof. Skills & Viewpts.	2.45	3,89	
25. Disc. Methods	1.33	3,89	
<u>Development of General Skills</u>			
23. Think & Prob. Solving	7.68**	3,89	1< 2,3,4
26. Creative Cap.	4.14**	3,89	1,2< 3,4
29. Effec. Comm.	1.73	3,89	
<u>Personal Development</u>			
27. Pers. Respon.	5.51**	3,89	1,3< 2,4
28. Gen. Lib. Ed.	2.30	3,89	
30. Implic. for Self Undersg.	4.95**	3,89	1< 2,3,4
Overall	2.78*	3,89	1< 2,3,4

* $p < .05$ ** $p < .01$

level. Therefore, comparisons of part-time instructors across levels on sex and educational degree attainment variables showed similarities on student ratings that were greater than the differences. The one major exception was the instructor variable related to teaching experience. The part-time instructors who reported three years experience or less were rated significantly lower than instructors with more experience. Tukey's results indicated that the more teaching experience the instructor claimed, the higher the end-of-term student ratings. Therefore, of the three instructor demographic variables investigated, amount of teaching experience seemed to be significantly related to student ratings.

One other additional analysis performed by the researcher was related to differences between student motivation levels (short-term course students versus long-term course students). The IDEA standard form computer-generated summary report utilized in the study reported a class motivation level score from I-V with I=lowest and V=highest. This class motivation level score was based on the mean student ratings to item 36 of the evaluation form. This item asked students to rate themselves on a 1-5 basis on how strong their desire was to take this particular course. As the researcher consulted with the instructors assigned to the full-feedback group, she noticed that there appeared to be distinct differences between the class motivation levels printed on the summary reports of instructors teaching short-term courses and instructors teaching long-term courses. Therefore, a post hoc analysis was conducted to test this perceived difference. A one-way analysis of variance was performed to test for differences between motivation levels

reported by students enrolled in short-term courses and students enrolled in long-term courses at the mid-term (pretest) and end-of-term (posttest) evaluation points. As indicated in Table 12, findings clearly showed a significant difference between motivation levels of students who enroll in short-term, non-credit courses and students who enroll in long-term, credit courses at the .05 level, with the short-term course students being more highly motivated.

Summary of the Chapter

This chapter contains the findings of the study. A total of 94 instructors participated in the study and received student ratings of instruction and self-ratings of instruction summary reports which were analyzed. In addition, 94 Instructor Questionnaires developed by the investigator were completed and analyzed. Each of the six original hypotheses were tested. Of the six hypotheses analyzed, five were tested in reference to one of the two dependent variables in the study, either end-of-term student ratings of instruction or end-of-term instructor self-ratings utilizing the 10 learning objective means of the IDEA standard form and the overall evaluation T-score. The sixth

Table 12

Results of Anova Comparisons for Class Motivation Levels

RATINGS	SHORT-TERM MEAN	LONG-TERM MEAN	F-VALUE	df
Mid-term	4.30	2.51	53.80**	1,68
End-of-term	4.42	2.45	80.52**	1,92

* $p < .05$ ** $p < .01$

the overall evaluation T-score. The sixth hypothesis utilized the last three items of the five-item Instructor Questionnaire developed by the investigator to analyze for differences in instructor attitudes toward student ratings of instruction. Post hoc analyses utilized additional Anovas to investigate the differences between the instructor demographic variables and student motivation levels.

An Anova was utilized to test for overall differences on the 11 student rating item means between the feedback and no-feedback treatment groups. Follow-up analyses were done utilizing Fisher's LSD method for multiple comparisons of each treatment group to test for specific differences between the significantly different item means and to test any sensitizing effects the pretest may have had on posttest student ratings and instructor self-ratings. Hypothesis 1 analyzed the effect the full feedback condition (printed feedback with oral consultation) and the partial feedback condition (printed feedback only) had on subsequent student ratings of part-time faculty instruction. The overall Anova indicated only 5 out of 11 item means significantly different at the .05 level. Of the 30 paired item analyses performed, only 15 learning objective item means were found significant at the .05 level, resulting in a rejection of Hypothesis 1. A related samples t-test of paired comparisons testing for differences between the mid-term and end-of-term ratings means on each of the 11 items within the two feedback and one no-feedback groups showed the greatest amount of change in student ratings occurred within the full feedback group. Although the hypothesis was rejected, overall results indicated that mid-term student ratings feedback seemed to have had a moderate, but non-significant, ef-

fect on subsequent student ratings of part-time faculty. There were no significant differences found between the two feedback conditions, indicating that the mid-term printed feedback condition may be at least as effective as mid-term printed feedback with oral consultation on subsequent student ratings of part-time faculty.

Hypothesis 2 utilized a regression analysis model to test whether instructor self-overrating was a valid predictor of end-of-term student ratings for part-time faculty. Of the 20 t-tests comparing differences in regression weights of instructor self-overraters and underraters, none of the overraters' regression weights were significant at the .05 level. The results indicated that overrating was not a valid predictor of end-of-term student ratings, and the hypothesis was, therefore, rejected.

Hypotheses 3 and 4 tested the relationship of instructor self-overrating and self-underrating to end-of-term self-ratings. Of the 20 correlated t-tests performed to test each hypothesis on the 10 learning objective item variables, 15 were significant at the .05 level; 9 item means for the self-overraters and 6 item means for the self-underraters, thus supporting Hypothesis 3 and partially supporting Hypothesis 4.

Hypothesis 5 tested for differences of the end-of-term student ratings between instructors of short-term courses and instructors of long-term courses in the feedback condition. Of the 10 learning objective items and the overall evaluation T-score tested, no significant differences were found at the .05 level in the direction predicted by the hypothesis. Nine of the 11 item variable means, however, showed higher end-of-term student ratings for part-time faculty teaching short-

term, non-credit courses than for part-time faculty teaching long-term, credit courses. Findings suggested that the hypothesis be rejected, since results seemed to indicate that mid-term ratings feedback may have had moderate effects on the subsequent student ratings of part-time instructors teaching short-term, non-credit courses.

Hypothesis 6 utilized a t-statistic to test for differences between instructor levels (short-term versus long-term) on instructor ratings of five items on the Instructor Questionnaire developed by the researcher to assess instructors' opinions towards student ratings of instruction. Of the five t-statistic analyses performed, results indicated that differences in responses to two of the three items measuring instructor opinions towards student ratings were significant at the .05 level with the direction of the difference indicating a higher ratings mean for instructors of short-term courses. Although found non-significant at the .05 level, the other three items also showed a higher ratings mean from instructors of short-term courses. Therefore, the null hypothesis was rejected, indicating that part-time instructors teaching short-term courses seemed to value student ratings of instruction more than part-time instructors teaching long-term courses.

Post hoc analyses of variance were utilized to test for differences on instructor demographic characteristics. Results indicated that of the three instructor demographic variables tested, only one, teaching experience, seemed to be significantly related to the dependent variable, student ratings of instruction, at the .05 level of significance.

Additional analyses of variance were performed to test for differences in class motivation levels comparing the means of item 36 of

the IDEA standard form. Findings clearly indicated students of short-term, non-credit courses were significantly more motivated than students of long-term, credit courses at the .05 level.

Considering all variables of interest tested, the similarities between the two feedback treatment groups were greater than the differences across instructor levels, indicating that printed mid-term feedback may be at least as effective as printed mid-term feedback with oral consultation on subsequent student ratings of part-time faculty. Paired within group comparisons of the feedback and no-feedback conditions, however, showed greater significant differences in the change of subsequent student ratings for the full feedback group (printed feedback with oral consultation) than for the partial feedback group (printed feedback only). Further investigation between instructor levels (short-term course versus long-term course) indicated an opposite effect than predicted. Results, therefore, seemed to suggest that, overall, mid-term feedback had a greater moderate significant effect (.05 level) on the subsequent end-of-term student ratings of part-time instructors of short-term, non-credit courses than on the subsequent student ratings of instructors of long-term, credit courses.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter presents a summary of the study, conclusions, implications, and recommendations related to the findings.

Summary

The primary purpose of this study was to determine the effect different forms of student ratings feedback had on subsequent part-time faculty student ratings and instructor self-ratings. Part-time faculty opinions towards student ratings of instruction also were explored. The Instructional Development and Effectiveness Assessment (IDEA) standard form (Kansas State University, 1975) was the evaluation tool utilized in the study to assess the two dependent variables, student ratings of instruction and instructor self-ratings. The researcher developed the Instructor Questionnaire (see Appendix D) to measure the degree to which an instructor felt the institution valued student ratings of instruction and how much an instructor personally valued student ratings of instruction. Prior to the beginning of the study, the researcher gathered instructor demographic information regarding sex, educational degree obtained, and years of teaching experience.

A pilot study consisting of eight part-time instructors teaching short-term courses was conducted to assess the feasibility of the two instruments. Student ratings of instruction data, instructor self-ratings data, and response data from the Instructor Questionnaire were gathered and verified. The final study included a total of 94 part-time

faculty from two different post-secondary institutions. Fifty-three of the participants were instructors of short-term, non-credit courses from the Division of Lifelong Learning of the School of Extended Studies at the University of South Florida and 41 were part-time instructors of long-term, credit courses from the Educational Services Department of the Weekend College Division at Saint Leo College.

A one-way analysis of variance was used to test Hypothesis 1 on the 10 learning objective item means and the overall evaluation T-score. Follow-up analysis for those items indicating a significant F value was conducted utilizing Fisher's LSD method for multiple comparisons to further analyze for between treatment group differences. In total, 30 Fisher's LSD tests for paired groups differences were performed to test Hypothesis 1. In each of these analyses, the dependent variable was student ratings of instruction. Further Anova analyses to test for the sensitizing effect of the pretest treatment on the posttest (end-of-term) student ratings of instruction and instructor self-ratings showed no significant effects at the .05 level.

Hypothesis 1. Part-time faculty who receive printed summary feedback along with oral consultation about their mid-term student ratings will receive higher end-of-term student ratings than part-time faculty who receive only printed summary feedback of mid-term student ratings, and part-time faculty who receive only printed summary feedback of mid-term student ratings will receive higher end-of-term student ratings than part-time faculty who do not receive mid-term student ratings feedback.

Hypothesis 1 was not supported at the .05 level of significance in a general analysis of variance test for differences on each of the 11 item means. However, Fisher's LSD paired comparison tests for specific differences between treatment groups on the 5 items, that had significant differences in the general Anova showed 15 comparisons were significant at the .05 level out of a possible 30 comparisons. This finding resulted in a rejection of Hypothesis 1, although inspection of the means of the 10 item learning objectives and the overall evaluation T-score of the two feedback conditions were in the predicted direction indicating a positive, but non-significant effect for the instructors who received the full feedback (printed feedback with oral consultation) and partial feedback (printed feedback only). The instructors who received full feedback of mid-term student ratings (printed feedback with oral consultation) did not appear to receive significantly higher end-of-term student ratings than instructors who received partial feedback (printed feedback only). Generally, part-time instructors who received printed feedback of mid-term student ratings tended to receive higher end-of-term student ratings on more learning objective item variables and the overall evaluation T-score than did instructors who received mid-term printed feedback with oral consultation or who received no mid-term printed feedback of student ratings. This finding suggests that mid-term printed feedback may be at least as effective on subsequent student ratings of part-time faculty as mid-term printed feedback with oral consultation. Within group paired comparisons, however, seemed to indicate that the full feedback group (printed feedback with oral consultation) showed significant change on more student

ratings item means from the mid-term evaluation to the end-of-term evaluation than did the other three treatment groups.

Hypotheses 2, 3, and 4 tested the influence of instructor self-ratings on the 10 learning objective item means. No overall evaluation score was generated from instructor self-ratings, and thus was not analyzed.

Hypothesis 2. Part-time faculty assigned to both the mid-term feedback and no-feedback groups whose self-ratings of instruction are higher than their students' ratings of instruction at mid-term will receive higher end-of-term student ratings than part-time faculty whose self-ratings of instruction are equal to or lower than their students' ratings of instruction at mid-term.

Hypothesis 2 utilized a linear regression statistical model to calculate regression weights and a t-statistic to test the hypothesis. Based on the equilibrium theory used in Centra's (1973b) study, this hypothesis tested instructor self-overrating in the feedback condition as a predictor of end-of-term student ratings. Regression weights were calculated for the 10 learning objective item means in two instructor categories: those who self-overrated and instructors who self-underrated for both the feedback and no-feedback conditions. The 40 regression weights were then tested with a one-tailed t-statistic to analyze for differences between the feedback and no-feedback conditions for each instructor category: underraters and overraters. The t-test results indicated differences on only 5 out of 20 regression weights analyzed were significant at the .05 level. The results, therefore, indicated that the hypothesis was not supported.

Hypothesis 3. Part-time faculty assigned to both the mid-term feedback and no-feedback groups whose self-ratings of instruction are higher than their students' ratings of instruction will change their end-of-term self-ratings of instruction.

A one-tailed correlated t-test statistic was performed to test for differences on the 10 learning objective items. Results indicated that the differences in all 10 item means were in the predicted direction of the hypothesis and 9 out of 10 differences in item means were significant at the .05 level.

This seemed to indicate that instructors who both rated their own evaluation of instruction higher than their actual student ratings and who received student ratings feedback tended to lower their subsequent self-ratings score. The hypothesis was, therefore, generally supported.

Hypothesis 4. Part-time faculty assigned to both the mid-term feedback and no-feedback groups whose self-ratings of instruction are equal to or lower than their students' ratings of instruction at mid-term will raise their end-of-term self-ratings of instruction.

One-tailed correlated t-test results indicated that the differences in only 6 out of 10 learning objective items significant at the .05 level, resulting in a partial acceptance of Hypothesis 4. Since the instructors in Hypothesis 3 who tended to overrate themselves at mid-term significantly changed their end-of-term self-ratings by lowering their scores on 9 of the 10 learning objective item variables, and the instructors in Hypothesis 4 who tended to underrate themselves at mid-term significantly changed their end-of-term self-ratings by increasing their scores on 6 of the 10 learning objective item variables, an additional

t-test statistic was performed to test for the statistical phenomenon known as regression to the mean. Results of this analysis indicated no differential statistical regression. Therefore, results confirmed support for Hypothesis 3 and partial support for Hypothesis 4.

Hypothesis 5. Part-time faculty teaching long-term courses who receive mid-term student ratings feedback will receive higher end-of-term student ratings than part-time faculty teaching short-term courses who receive mid-term student ratings feedback.

Results of the Anova performed on the 10 learning objective item means and the overall evaluation T-score indicated no significant differences in the direction predicted by the hypothesis at the .05 level between the instructors of long-term courses and instructors of short-term courses in the feedback condition. Inspection of the end-of-term (posttest) student ratings means, however, indicated that 9 of the 11 item means were higher for part-time instructors teaching short-term, non-credit courses than for part-time instructors teaching long-term, credit courses. Results seemed to indicate that mid-term student ratings feedback tended to have had a more positive effect on the end-of-term student ratings of short-term course instructors; these results were the reverse of the prediction. Therefore, based on the statistical analyses, Hypothesis 5 was rejected.

Hypothesis 6. There is no significant difference between the opinions of part-time faculty teaching both long-term and short-term courses towards student ratings of instruction.

Hypothesis 6 tested for differences in instructor opinions towards student ratings of instruction utilizing a t-statistic analysis on the

five items of the Instructor Questionnaire. No significant differences were found at the .05 level between instructors on the first two items of the Instructor Questionnaire. These items, however, were more informational in nature and measured how much importance instructors felt their respective institutions placed and should place on student opinions of instruction. The results of these two items, although not significant at the .05 level, indicated higher means for instructors of short-term courses. The other three items measured instructor opinions towards student ratings of instruction. The t-test results indicated that the differences in two of these three items were significant at the .05 level with instructors of short-term courses placing higher value on student ratings of instruction than the instructors teaching long-term courses. The other item, although found non-significant at the .05 level, also indicated a higher mean for instructors of short-term courses. The findings seemed to suggest that part-time faculty teaching short-term, non-credit courses valued student ratings of instruction more than instructors teaching long-term, credit courses.

Additional analyses were made on three instructor demographic variables and on class motivation levels. The instructor demographic data of sex, educational degree obtained, and teaching experience were tested with an Anova on the 10 learning objective items and the overall evaluation T-score. Results showed only teaching experience as a critical variable in relation to subsequent student ratings of instruction. The instructors with the least amount of teaching experience (0-3 years) were rated significantly lower on 6 of the 10 learning objective item means and the overall evaluation T-score at the .05 level.

Student motivation levels were analyzed with a one-way Anova on the mid-term and end-of-term ratings of the class motivation level score reported on the IDEA standard form printed summary report. Results indicated clear significant differences at the .05 level between students enrolled in long-term courses and students enrolled in short-term courses on both the mid-term and end-of-term ratings. Students enrolled in short-term courses were more highly motivated than students enrolled in long-term courses.

When considering the results of the study, certain limitations in regard to their generalizability should be kept in mind. One limitation was the issue of instructor volunteers. Even though only two instructors of long-term courses and one instructor of short-term courses chose not to participate in the study, there is the possibility that these non-participating instructors differed from the ones that participated. In addition, the quasi-experimental design of the study did not allow random assignment of students to treatment groups. This lack of random assignment could have resulted in very different or biased groups per instructor.

Another limitation was that the study sample was drawn from the part-time instructor population of one state university's non-credit course program and one private college's non-traditional weekend college credit course program. Since the study involved only two institutions, generalizations to other institutions would be restricted. A final limitation was the fact that the researcher and the course coordinator were the same person functioning as the instructors' source of feedback information. This may have resulted in experimenter bias.

Conclusions

The results of analyses of variance of Hypothesis 1 regarding the first dependent variable, student ratings of instruction, indicated although non-significant overall, the instructors assigned to the two student ratings feedback conditions appeared to have improved on subsequent student ratings. Closer analysis of differences between the two feedback conditions showed that the similarities were greater than the differences between the two experimental groups, suggesting that the mid-term printed feedback may have been at least as effective as mid-term printed feedback with oral consultation. However, it is important to note that although the full feedback group (printed feedback with oral consultation) was not statistically different from the printed feedback only group, results suggest that mid-term printed feedback with oral consultation of student ratings did minimally effect some changes in subsequent student ratings of part-time faculty instructional behavior. Findings also suggest that the full feedback condition (printed feedback with oral consultation) showed improved end-of-term student ratings of the instructors who received that type of feedback. In other words, instructors who received printed summary feedback with oral consultation did receive better end-of-term student ratings on certain item variables.

Results of the analysis of the effect of feedback between instructor levels (instructors of short-term courses versus instructors of long-term courses) led the researcher to conclude that student ratings feedback appears to have had a more positive effect on changes of instructional behavior of instructors of short-term, non-credit courses as

measured by subsequent student ratings. This conclusion is evidenced by a statistical analysis result indicating the reverse direction as predicted by Hypothesis 5 and the rejection of Hypothesis 6. Although instructors teaching long-term courses had a longer amount of time to change instructional behavior, instructors teaching short-term courses seemed to have valued student ratings of instruction more. This could possibly explain the result that part-time instructors teaching short-term courses received higher end-of-term student ratings means on most item variables than did part-time instructors teaching long-term courses.

Hypotheses 2, 3, and 4 investigated the second dependent variable of instructor self-ratings. From the linear regression and t-statistic analyses results of Hypothesis 2, it generally would appear that in the feedback condition, instructor self-overrating was not a valid predictor of change in end-of-term student ratings for part-time instructors. Other results of instructor self-ratings testing Hypotheses 3 and 4 indicated that instructors who self-overrated (rated themselves higher than their students) at mid-term tended to rate themselves lower at the end-of-term; and instructors who self-underrated (rated themselves lower than their students rated them at mid-term) tended to rate themselves higher at the end-of-term. Instructors in the two mid-term feedback conditions received a written comparison summary of student ratings with self-ratings, while the instructors in the one no-feedback group who self-rated at mid-term did not. This result seems to suggest that the practice of instructor self-rating may have had a significant effect on increasing the instructor awareness of his/her own teaching practices.

Hypothesis 6 investigated differences between opinions instructors of long-term courses and instructors of short-term courses had towards student ratings. The analysis of the t-statistic data seems to suggest that instructors of short-term, non-credit courses tended to value student ratings data more highly than instructors of long-term, credit courses, resulting in a rejection of Hypothesis 6.

Of the three instructor demographic characteristics tested in this study, results indicated that instructor teaching experience is a critical variable in relation to the student ratings of part-time faculty. The statistical analyses clearly showed that the less experience the part-time instructor reported, the lower his/her student ratings of instruction were likely to be. Instructor sex and educational degree obtained did not appear as related variables to student ratings.

There also appeared to be a large significant difference between the motivation levels of students enrolled in short-term courses (non-credit courses) and students enrolled in long-term courses (credit courses). Students who enrolled in the short-term, non-credit courses tended to be more highly motivated.

Implications

The primary purpose of the study was to determine the effect different forms of student ratings feedback had on subsequent part-time faculty student ratings and instructor self-ratings. Part-time faculty opinions towards student ratings of instruction also were explored.

Although found non-significant at the .05 level, possibly the most important implication of this study was the apparently modest improvement student ratings feedback appeared to have had on the subsequent

student ratings of part-time faculty. The results of this study were consistent with earlier studies by Aleamoni (1978), Centra (1973a, 1977), McKeachie et al. (1971), and Sullivan and Skanes (1974) with one exception. Augmented mid-term student ratings feedback (printed feedback with oral consultation) appeared not to have been more significantly effective in changing certain instructional behavior of part-time faculty than was printed mid-term ratings feedback. These findings did not confirm an earlier study by Aleamoni (1978) which showed the positive effect of augmented student ratings feedback over printed ratings feedback on instructional changes. One major difference is that Aleamoni's study consisted of full-time faculty teaching credit courses. Student evaluation of instruction is a widely accepted and utilized evaluation instrument of credit courses. Although most research studies of the validity and reliability of student ratings have focused on its use with full-time faculty teaching credit courses, it has been widely adopted as an instructional evaluation tool with part-time faculty teaching both credit and non-credit courses. This evaluation instrument, adopted from traditional educational settings and implemented to evaluate the instruction of an emerging new type of instructor to American higher education (part-time faculty) teaching a new learning structure (non-credit courses), deserves further research investigation.

Further implications from this study suggest that not only does student ratings feedback help improve subsequent part-time faculty student ratings, but it appears also to have had a more positive effect on instructors of short-term, non-credit courses. This finding was in the reverse direction than predicted. The hypothesis prediction was based

on a study by Centra (1973b) in which he indicated that student ratings feedback did effect some changes in student ratings over time. Therefore, the investigator predicted that student ratings feedback would have a more positive effect on the student ratings of instructors of long-term courses than the instructors of short-term courses. The basis for the reasoning was that behavioral change requires time, and a longer time lapse existed in this study between the student ratings feedback point and the end-of-term evaluation point for instructors of long-term courses (six weeks) than short-term courses (two to three weeks). Results from this present study indicated the reverse situation, however. This finding may be the result of a "halo" effect since the instructors of short-term courses in the study had never before received student ratings feedback from the employing institution and were aware of the research nature of the study. Perhaps the sheer presence of a mid-term evaluation procedure in a non-credit course was sufficient to indirectly suggest to the class and the instructor the value of instructional quality to the educational institution. Another possible explanation of the results is that continual employment of part-time faculty teaching short-term courses is more tenuous in nature and offers less job security than faculty teaching long-term courses. This is because students typically enroll in non-credit courses on an elective basis as opposed to students in long-term courses who often enroll in these courses as requirements in their curriculum of study. Therefore, the non-credit nature of the short-term courses in the study is heavily dependent upon students who are satisfied with the instruction received. Consequently, in order to hold on to their jobs on a continuous basis,

enrollment in non-credit courses must be maintained. Sustainance of course enrollment levels are attained, in part, by part-time faculty who are aware and concerned about the degree of student satisfaction of instruction. Therefore, part-time faculty teaching short-term, non-credit courses possibly pay closer attention to student satisfaction levels than do the part-time faculty of longer term courses. This also may explain the findings which seemed to indicate that instructors of short-term, non-credit courses valued student opinion of instruction more than did instructors of long-term, credit courses.

Another possible explanation for the greater effect of student ratings on short-term course instructors may be due to the motivation levels of the students. The results of the post hoc analyses of student motivation levels confirmed that students in short-term, non-credit courses were more highly motivated to enroll in a particular course than students of long-term courses. This result was also consistent with some informal observations of the researcher who noted the more intense questioning of the students enrolled in short-term courses about the reason for and appropriateness of the evaluation procedures. It seemed that the long-term, credit course students were more accustomed to student evaluation of instruction procedures than were the students of the short-term courses. The long-term course instructors also were accustomed to student opinion ratings, since this is a dominant and well-accepted evaluation tool to them. Although both short-term and long-term course students were encouraged by the investigator to answer all items on the evaluation form to the best of their ability, anecdotal remarks by some short-term course students indicated more difficulty in

answering some items that "just didn't fit the course." Consequently, although the evaluation instrument had a forced-choice format, there may have been more response item omissions from the short-term course students, and this, in turn, may have affected the ratings data of the short-term courses. Another possible explanation of the apparently stronger effect of mid-term student ratings feedback on end-of-term ratings of part-time instructors of short-term courses is that the instructors of short-term courses teach a more highly motivated audience who question and challenge their instruction more than students enrolled in long-term, credit courses. This, in turn, would tend to give the instructor more informal student feedback specificity of his/her teaching behavior on a continuous basis, thus facilitating and expediting instructional change.

Results of the linear regression and t-statistic analysis suggest that the dependent variable of instructor self-overrating is not a valid predictor of end-of-term student ratings. This result was not consistent with Centra's 1973b study in which he found that according to equilibrium theory, student ratings feedback produced changes in instructors who rated themselves more favorably than their students rated them. Perhaps in this study, the difference in instructor self-ratings and student ratings in the feedback condition was not large enough to produce a discrepancy impact of necessary magnitude to motivate instructors to change their teaching practices.

Further results of the analyses of the dependent variable, instructor self-ratings, do imply a confirmation of the equilibrium theory, however. The result of the change in instructor end-of-term self-rating

for both instructor self-underraters and instructor self-overraters seems to indicate the effects of discrepancy on self-ratings. Based on equilibrium theory, the instructor faced with a discrepancy of either overrating or underrating his/her teaching performance was motivated to achieve "balance" or "consonance" with reality. This seemed to imply that the instructors who underrated themselves in comparison to student ratings were motivated to rate themselves higher on the end-of-term evaluation, and instructors who overrated themselves in comparison to student ratings were motivated to rate themselves lower on the end-of-term evaluation. Self-ratings implications for achieving increased instructor awareness of his/her own teaching practices are obvious and could prove to be a useful and effective tool for part-time faculty evaluation when utilized in conjunction with student ratings of instruction and instructional development programs.

The t-statistic analyses of part-time instructor responses to the Instructor Questionnaire was significant at the .05 level on two of the three items which measured instructor opinions of student ratings of instruction. Findings showed that instructors of short-term courses placed higher value on student ratings of instruction than did instructors of long-term courses. Implications are that part-time instructors teaching short-term, non-credit courses seemed to value more knowing how satisfied their students are and how their students perceive their teaching behavior; therefore, whenever possible, student ratings of instruction should be used as an evaluation tool. Since student ratings of instruction are a credible and reliable source of information, they could be utilized effectively in conjunction with instructional develop-

ment programs to improve the teaching behavior of part-time faculty teaching non-credit courses.

The results of the instructor demographic variables imply that sex and educational degree obtained do not appear to be related to the level of student ratings. This is consistent with the results of earlier studies. However, student ratings data suggest that instructor teaching experience has a significantly strong relationship to the teaching performance of part-time faculty, and this is consistent with previous research reported by Centra (1977). Results seem to imply that the least effective part-time instructors are those who have the least amount of teaching experience. Centra (1977) found that some of the lowest student ratings tended to occur during the instructor's first three years of teaching. Implications for employment decisions by educational institutions are obvious; wherever possible, institutions should try to employ part-time faculty with some prior college or adult education teaching experience. According to this study, the number of years teaching experience is a critical variable among other criteria to be considered when deciding to hire a part-time instructor for a particular area of expertise.

Recommendations for Further Research

As a result of this study several recommendations for further research are in order. These recommendations involve five main areas, the appropriateness of student ratings feedback of part-time faculty as an evaluation tool, augmented student ratings feedback, instructor self-ratings, characteristics and motivation of students enrolled in non-

credit courses, and the attitude of part-time instructors toward student ratings.

One recommendation of this study is that further attempts be made through research to discern more clearly the appropriateness of student ratings of instruction as a valid evaluation tool for part-time faculty, especially those instructors in a non-credit learning situation. Although student ratings feedback appeared to have a more positive effect on the student ratings of part time faculty teaching non-credit courses, some of the items contained in the evaluation tool used in this study seemed to the students to be inappropriate and at times were cause for concern. Even with thorough explanation from the investigator about the nature and intended use of the evaluation form, the students enrolled in short-term, non-credit courses appeared to be more apprehensive in answering certain items than were the students enrolled in long-term, credit courses. This appeared to be the case even though the evaluation instrument had a forced-choice format.

A second consideration concerns the need for continued research to further investigate the effect that different forms of augmented feedback might have on part-time instructional behavior. Perhaps a study with more than two kinds of student ratings feedback procedures of varying length and format (group versus individual, for example) would more clearly distinguish effective feedback modes, and the amount and intensity of feedback desirable to effect part-time faculty student ratings and, subsequently, teaching behavior.

A third recommendation is for further research in the use of instructor self-ratings data as a catalyst for increased instructor aware-

ness of teaching behavior. The results of this study seemed to imply this for instructors of both the feedback and no-feedback conditions. An interesting investigation would be to determine if the magnitude of instructor awareness of teaching performance varies with either formal feedback conditions, informal feedback conditions, or with different types of learning structures such as non-credit courses, for example.

A fourth recommendation involves further investigation into the differences in student characteristics and motivation of non-credit students as compared to credit students who enroll in classes taught by part-time faculty. If such student characteristic differences exist, do these differences contribute to part-time instructors of non-credit courses receiving more informal feedback from students in the classroom regarding their own teaching behavior than part-time instructors of credit courses?

A final recommendation for further research concerns the evaluation of part-time faculty opinion towards student ratings as an evaluation tool. This study's results led to the conclusion that part-time faculty teaching short-term, non-credit courses valued student ratings of instruction more than part-time faculty teaching long-term, credit courses. Perhaps further investigation utilizing a questionnaire with a seven-point Likert-type scale could further discern and distinguish any differences of part-time instructor opinions towards student ratings. Is the source of these differences, for example, an instructor characteristic, due to the type of course taught (credit versus non-credit), or is it perhaps institutionally related?

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APPENDIX A

INSTRUCTIONAL DEVELOPMENT EFFECTIVENESS ASSESSMENT (IDEA)
STANDARD FORM (MID-TERM)

IDEA Survey form --- Student Reactions to Instruction and Courses

Your thoughtful answers to these questions will provide helpful information to your instructor.

*Describe the frequency of your instructor's teaching procedures, using the following code:

1-HARDLY EVER 2-OCCASIONALLY 3-SOMETIMES 4-FREQUENTLY 5-ALMOST ALWAYS

The Instructor:

1. Promotes teacher-student discussion (as opposed to mere responses to questions).
2. Finds ways to help students answer their own questions.
3. Encourages students to express themselves freely and openly.
4. Seems enthusiastic about the subject matter.
5. Changes approaches to meet new situations.
6. Gives examinations which stress unnecessary memorization.
7. Speaks with expressiveness and variety in tone of voice.
8. Demonstrates the importance and significance of the subject matter.
9. Makes presentations which are dry and dull.
10. Makes it clear how each topic fits into the course.
11. Explains the reasons for criticisms of students' academic performance.
12. Gives examination questions which are unclear.
13. Encourages student comments even when they turn out to be incorrect or irrelevant.
14. Summarizes material in a manner which aides retention.
15. Stimulates students to intellectual effort beyond that required by most courses.
16. Clearly states the objectives of the course.
17. Explains course material clearly, and explanations are to the point.
18. Relates course material to real life situations.
19. Gives examination questions which are unreasonably detailed (picky).
20. Introduces stimulating ideas about the subject.

* On each of the objectives listed below, rate the progress you are making in this course compared with that made in other courses you have taken at this university or another university. In this course my progress so far is:

- 1-LOW (lowest 10 percent of courses I have taken here)
- 2-LOW AVERAGE (next 20 percent of courses)
- 3-AVERAGE (middle 40 percent of courses)
- 4-HIGH AVERAGE (next 20 percent of courses)
- 5-HIGH (highest 10 percent of courses)

Progress on:

21. Gaining factual knowledge (terminology, classifications, methods, trends).
22. Learning fundamental principles, generalizations, or theories.
23. Learning to apply course material to improve rational thinking, problem-solving and decision making.
24. Developing specific skills, competencies and points of view needed by professionals in the field most closely related to this course.
25. Learning how professionals in this field go about the process of gaining new knowledge.
26. Developing creative capacities.
27. Developing a sense of personal responsibility (self-reliance, self discipline).
28. Gaining a broader understanding and appreciation of intellectual-cultural activity (music, science, literature, etc.).
29. Developing skill in expressing myself orally or in writing.
30. Discovering the implications of the course material for understanding myself (interests, talents, values, etc.).

* On the next four questions, compare this course with others you have taken at this institution, using the following code:

1-MUCH LESS THAN MOST COURSES 2-LESS THAN MOST 3-ABOUT AVERAGE
4-MORE THAN MOST 5-MUCH MORE THAN MOST

The course:

31. Amount of reading.
32. Amount of work in other (non-reading) assignments.
33. Difficulty of subject matter.
34. Degree to which the coursehangs together (various topics and class activities are related to each other).

Describe your attitude and behavior in this course, using the following code:

1-DEFINITELY 2-MORE FALSE THAN TRUE 3-IN BETWEEN 4-MORE TRUE THAN FALSE
5-DEFINITELY TRUE

Self-rating so far:

- 35. I have worked harder in this course than on most courses I have taken.
- 36. I had a strong desire to take this course.
- 37. I would like to take another course from this instructor.
- 38. As a result of taking this course, I have more positive feelings toward this field of study.
- 39. Leave this space blank..
- A. Blacken space number 1 on the Response Card.

*For the following six questions, B-6, describe the frequency of your instructor's teaching procedures, using the following code:

1-HARDLY EVER 2-OCCASIONALLY 3-SOMETIMES 4-FREQUENTLY 5-ALMOST ALWAYS

The instructor:

- B. Relates various topics and class activities to each other.
- C. Discusses the cultural and ethic values of the subject.
- D. Relates the course materials to other courses and academic fields.
- E. Is willing to spend extra time with students.
- F. Cares about students as people.
- G. Shows interest in student ideas.

*Please answer these additional questions using the following responses:

1-STRONGLY DISAGREE 2-DISAGREE 3-NEITHER AGREE OR DISAGREE 4-AGREE
5-STRONGLY AGREE

- 40. Compared to others I have had, this instructor is one of the most effective.
- 41. Overall, this course is of considerable value to me.

APPENDIX B

INSTRUCTIONAL DEVELOPMENT EFFECTIVENESS ASSESSMENT (IDEA)
STANDARD FORM (END-OF-TERM EVALUATION)



SURVEY FORM -- STUDENT REACTIONS TO INSTRUCTION AND COURSES

Your thoughtful answers to these questions will provide helpful information to your instructor.

• Describe the frequency of your instructor's teaching procedures, using the following code:

- | | | |
|----------------|--------------|-----------------|
| 1—Hardly Ever | 3—Sometimes | |
| 2—Occasionally | 4—Frequently | 5—Almost Always |

The instructor:

1. Promoted teacher-student discussion (as opposed to mere responses to questions).
2. Found ways to help students answer their own questions.
3. Encouraged students to express themselves freely and openly.
4. Seemed enthusiastic about the subject matter.
5. Changed approaches to meet new situations.
6. Gave examinations which stressed unnecessary memorization.
7. Spoke with expressiveness and variety in tone of voice.
8. Demonstrated the importance and significance of the subject matter.
9. Made presentations which were dry and dull.
10. Made it clear how each topic fit into the course.
11. Explained the reasons for criticisms of students' academic performance.
12. Gave examination questions which were unclear.
13. Encouraged student comments even when they turned out to be incorrect or irrelevant.
14. Summarized material in a manner which aided retention.
15. Stimulated students to intellectual effort beyond that required by most courses.
16. Clearly stated the objectives of the course.
17. Explained course material clearly, and explanations were to the point.
18. Related course material to real life situations.
19. Gave examination questions which were unreasonably detailed (picky).
20. Introduced stimulating ideas about the subject.

• On each of the objectives listed below, rate the progress you have made in this course compared with that made in other courses you have taken at this college or university. In this course my progress was:

- | |
|--|
| 1—Low (lowest 10 percent of courses I have taken here) |
| 2—Low Average (next 20 percent of courses) |
| 3—Average (middle 40 percent of courses) |
| 4—High Average (next 20 percent of courses) |
| 5—High (highest 10 percent of courses) |

Progress on:

21. Gaining factual knowledge (terminology, classifications, methods, trends).
22. Learning fundamental principles, generalizations, or theories.
23. Learning to apply course material to improve rational thinking, problem-solving and decision-making.
24. Developing specific skills, competencies and points of view needed by professionals in the field most closely related to this course.
25. Learning how professionals in this field go about the process of gaining new knowledge.
26. Developing creative capacities.
27. Developing a sense of personal responsibility (self-reliance, self-discipline).
28. Gaining a broader understanding and appreciation of intellectual-cultural activity (music, science, literature, etc.).
29. Developing skill in expressing myself orally or in writing.
30. Discovering the implications of the course material for understanding myself (interests, talents, values, etc.).

• On the next four questions, compare this course with others you have taken at this institution, using the following code:

- | |
|-------------------------------|
| 1—Much Less than Most Courses |
| 2—Less than Most |
| 3—About Average |
| 4—More than Most |
| 5—Much More than Most |

The Course:

31. Amount of reading.
32. Amount of work in other (non-reading) assignments.
33. Difficulty of subject matter.
34. Degree to which the course hung together (various topics and class activities were related to each other).

• Describe your attitudes toward and behavior in this course, using the following code:

- | | |
|------------------------|------------------------|
| 1—Definitely False | 4—More True than False |
| 2—More False than True | 5—Definitely True |
| 3—In Between | |

Self-rated:

35. I worked harder on this course than on most courses I have taken.
36. I had a strong desire to take this course.
37. I would like to take another course from this instructor.
38. As a result of taking this course, I have more positive feelings toward this field of study.
39. Leave this space blank. Continue with question A.

A. Blacken space number 1 on the Response Card.

• For the following six questions, B-G, describe the frequency of your instructor's teaching procedures, using the following code:

- | | | |
|----------------|--------------|-----------------|
| 1—Hardly Ever | 3—Sometimes | |
| 2—Occasionally | 4—Frequently | 5—Almost Always |

The instructor:

- B. Related various topics and class activities to each other.
- C. Discussed the cultural and esthetic values of the subject.
- D. Related the course materials to other courses and academic fields.
- E. Was willing to spend extra time with students.
- F. Cared about students as people.
- G. Showed interest in student ideas.

Please answer these additional questions using the following responses:

- | |
|-------------------------------|
| 1 - Strongly Disagree |
| 2 - Disagree |
| 3 - Neither Agree or Disagree |
| 4 - Agree |
| 5 - Strongly Agree |

40. Compared to others I have had, this instructor has been one of the most effective.
41. Overall, this course was of considerable value to me.

APPENDIX C

INSTRUCTIONAL DEVELOPMENT EFFECTIVENESS ASSESSMENT
SURVEY ITEM RELIABILITIES, STANDARD DEVIATIONS, AND
STANDARD ERRORS OF MEASUREMENT

Item Reliabilities, Standard Deviations, and Standard Errors of
Measurement for IDEA Standard Form

Item	Small Classes (10 raters) N = 440				Medium Classes (20 raters) N = 415				Large Classes (40 raters) N = 226			
	r _o	r _{sb}	SD	SE _{ment}	r _o	r _{sb}	SD	SE _{ment}	r _o	r _{sb}	SD	SE _{ment}
1	.65	.79	.67	.31	.82	.90	.69	.22	.91	.95	.82	.18
2	.50	.67	.63	.36	.74	.85	.57	.22	.87	.93	.62	.16
3	.53	.69	.61	.34	.80	.89	.60	.20	.89	.94	.69	.17
4	.58	.73	.55	.29	.74	.85	.53	.21	.85	.92	.70	.20
5	.50	.67	.61	.35	.69	.82	.59	.25	.81	.90	.54	.17
6	.40	.57	.74	.49	.47	.64	.67	.40	.64	.78	.57	.27
7	.61	.76	.66	.32	.77	.87	.68	.25	.87	.93	.67	.18
8	.46	.63	.51	.31	.72	.84	.50	.20	.83	.91	.50	.15
9	.56	.72	.69	.37	.74	.85	.68	.26	.83	.91	.59	.18
10	.43	.60	.58	.37	.65	.79	.50	.23	.82	.90	.48	.15
11	.44	.61	.78	.49	.56	.72	.60	.32	.68	.81	.51	.22
12	.52	.68	.74	.42	.50	.67	.66	.38	.69	.82	.58	.25
13	.44	.61	.69	.43	.65	.79	.57	.26	.80	.89	.58	.19
14	.45	.62	.68	.42	.65	.79	.54	.25	.80	.89	.57	.19
15	.52	.68	.72	.41	.66	.80	.60	.27	.81	.90	.56	.18
16	.45	.62	.60	.37	.69	.82	.56	.24	.84	.91	.55	.17
17	.55	.71	.62	.33	.76	.86	.62	.23	.86	.92	.59	.17
18	.60	.75	.68	.34	.77	.87	.65	.23	.81	.90	.62	.20
19	.42	.59	.77	.49	.64	.78	.68	.32	.75	.86	.62	.23
20	.62	.77	.68	.33	.76	.86	.69	.26	.86	.92	.60	.17
21	.47	.64	.57	.34	.68	.81	.51	.22	.80	.89	.45	.15
22	.36	.53	.55	.38	.63	.77	.49	.23	.70	.82	.41	.17
23	.37	.54	.62	.42	.66	.80	.53	.24	.79	.88	.51	.18
24	.50	.67	.66	.38	.70	.82	.51	.22	.79	.88	.50	.17
25	.52	.68	.71	.40	.71	.83	.60	.25	.76	.86	.50	.19
26	.60	.75	.71	.36	.71	.83	.61	.25	.78	.88	.54	.19
27	.47	.64	.65	.39	.62	.77	.55	.26	.75	.86	.46	.17
28	.58	.73	.87	.45	.73	.84	.72	.29	.65	.79	.56	.21
29	.69	.82	.84	.36	.79	.88	.75	.26	.84	.91	.61	.18
30	.54	.70	.72	.39	.71	.83	.61	.25	.64	.78	.56	.26
31	.78	.88	.81	.28	.86	.92	.76	.21	.92	.96	.69	.14
32	.67	.80	.67	.30	.78	.88	.64	.22	.91	.95	.66	.15
33	.66	.80	.61	.27	.78	.88	.56	.19	.89	.94	.60	.15
34	.41	.58	.55	.36	.64	.78	.48	.23	.73	.84	.43	.17
35	.45	.62	.62	.38	.66	.80	.58	.26	.85	.92	.58	.16
36	.54	.70	.74	.41	.74	.85	.69	.27	.84	.91	.61	.18
37	.62	.77	.80	.38	.78	.88	.72	.25	.86	.92	.75	.21
38	.56	.72	.66	.35	.69	.82	.61	.26	.80	.89	.58	.19
39	.22	.36	.38	.30	.28	.44	.30	.22	.54	.70	.23	.13
AVERAGE		.69		.37		.81		.25		.89		.18

NOTES: r_o - split-half correlations, e.g., based upon 5 of 10 raters. r_{sb} - split-half correlations corrected by Spearman-Brown formula.

Source: IDEA Technical Report No. 4: Description of IDEA Standard Form Data Base.
Manhattan, KS: Center for Faculty Evaluation and Development, Kansas State University, 1978.

APPENDIX D

INSTRUCTOR QUESTIONNAIRE

Division of Lifelong Learning

Instructor Questionnaire

Your answers to these questions will provide helpful information to the Division of Lifelong Learning.

On each question below, please circle your answers using the following code:

1	2	3	4	5
very little	little	average	somewhat	very much

1. How much importance do you think the University of South Florida places on student evaluations?

1	2	3	4	5
---	---	---	---	---

2. How much importance do you think the University of South Florida should place on student evaluations of instruction?

1	2	3	4	5
---	---	---	---	---

3. How much weight do you feel student evaluations of instruction should carry with your overall evaluation as an instructor in the Division of Lifelong Learning?

1	2	3	4	5
---	---	---	---	---

4. How useful do you feel the results of student ratings of instruction are?

1	2	3	4	5
---	---	---	---	---

5. How much importance do you place on knowing how satisfied your students are with your teaching?

1	2	3	4	5
---	---	---	---	---

Instructor Name: _____

APPENDIX E
COVER MEMORANDUMS

University of South Florida
School of Extended Studies

Memorandum

DATE: February 1, 1986
TO: All Instructors of the Division of Lifelong Learning
FROM: *LL*
Lee Leavengood, Director
SUBJECT: Student Evaluation of Instructor Study

The School of Extended Studies is participating in a very important school-wide study investigating new techniques for gathering student ratings of instruction data. This study is extremely vital since it will give the University and the School of Extended Studies new insights into the effect of student ratings on teaching behavior. Of particular interest in this investigation is what students are able to evaluate in the classroom and how useful this information might be to the instructor. Your full participation is needed and appreciated in this study since its results are critical to the future planning of the Division of Lifelong Learning.

Incorporated into this study will be the "piloting" of a new student evaluation form which will be administered in each class by a course coordinator. Most classes will have this form administered twice during this semester; once at mid-term and once at the end of the term, and some only at the end of the term, depending upon which group you are assigned. In any case, you have my complete assurance that the strictest confidence will be kept, and that only you and the course coordinator will see your individual student ratings report.

Please find enclosed a short instructor questionnaire regarding student evaluation of instruction for you to fill out. You are also requested to choose specific course objectives for your class and rate their importance on the enclosed Faculty Information Card II (purple). Please return the completed instructor questionnaire and the Faculty Information Card II by February 15, 1986, in the enclosed envelope.

On behalf of the Division of Lifelong Learning let me thank you for your participation in this valuable research study.



UNIVERSITY OF SOUTH FLORIDA

TAMPA • ST. PETERSBURG • FORT MYERS • SARASOTA

February 5, 1986

Dear Saint Leo College Educational Services Faculty:

You recently received a memo from David Koval, Dean of Educational Services, regarding a dissertation research study in which Saint Leo College will participate during this current term.

Of particular interest in this investigation is what students are able to evaluate in the classroom, and how useful this information might be to you, the instructor. Pivotal to the study will be a student evaluation form which will be administered either by me or an assistant in each class. Most classes will have this form administered twice during this semester; once at mid-term and once at the end of the term, depending upon which group you are assigned. You will receive a phone call from me to inform you of your particular course evaluation schedule. In any case, you have complete assurance from Saint Leo College that the strictest confidence will be kept, and that only you will see your individual student ratings report.

Please find enclosed a short instructor questionnaire regarding student evaluation of instruction for you to complete. You are also requested to choose specific course objectives for your class(es) and rate their importance to you on the enclosed Faculty Information Card II (purple). Please return the completed instructor questionnaire and the Faculty Information Card II by February 19, 1986 in the enclosed stamped envelope.

On behalf of Saint Leo College Educational Services, let me thank you for your participation in this research study.

Sincerely,

A handwritten signature in cursive script that reads "Cheryl M. Burbano".

Cheryl M. Burbano

APPENDIX F

ORAL CONSULTATION FEEDBACK INSTRUCTIONS

Course Coordinator Consultation Instructions

In order to assure uniform procedures in consultative feedback to instructors, please adhere to the following guidelines in your conferences:

1. Telephone the instructor the day after the mid-term assessment and set up a conference appointment within one week.
2. Make the instructor feel comfortable, offer coffee and ask generally how he/she feels the course is going.
3. Explain that the assessment is part of an important division study of the effect of student ratings of instruction on teaching, and how much his/her participation in the study is appreciated.
4. Give the instructor a copy of the computer summary results and the comparative feedback data. Allow the instructor 5-10 minutes to look over the information.
5. Tell the instructor that in order to help him/her to understand the results, you will be happy to review the report with him/her.
6. Proceed to summarize and interpret the results. Start with the overall results, then proceed to interpret parts I, II, III, IV, and V of the report. Stress the positive item results as well as those needing improvement.
7. Proceed to interpret the comparative data results by comparing instructor self-evaluation to the overall student ratings and individual items with a focus on the discrepancy items.
8. Interpret Part VI, Diagnostic Summary and Suggestions for Instructional Improvement.

9. Thank the instructor for his/her time. Remind him/her that there will be one more student assessment at the end of the term. Emphasize that the Division of Lifelong Learning is willing to help the instructor with any aspect of his/her course.

APPENDIX G
STUDY COVER LETTERS

Dear Lifelong Learning Instructor:

As you are aware, the School of Extended Studies is involved in a very important, university-wide study investigating new techniques for gathering student ratings of instruction data. This study is extremely vital since it will give the University and the School of Extended Studies new insights into the effect of student ratings on teaching behavior. Of particular interest in this investigation is what students are able to evaluate in the classroom and how useful this information might be to the instructor. Your full participation is expected in this study since its results are critical to the future planning of the Division of Lifelong Learning.

Incorporated into this study will be the "piloting" of a new student evaluation form which will be administered in each class by the course coordinator. Most classes will have this form administered twice during this semester; once at mid-term and once at the end of the term and some only at the end of the term, depending upon which group you are assigned. In any case, you have my complete assurance that the strictest confidence will be kept, and that only you and the course coordinator will see your individual student ratings report.

On behalf of the Division of Lifelong Learning let me thank you for your participation in this valuable research study.

Sincerely,



Lee Leavengood, Director
Division of Lifelong Learning

Saint Leo College

Educational Services
(904) 588-8236

Post Office Box 2248
Saint Leo, Florida 33574-2248



TO: Educational Services Faculty

FROM: David J. Koval, Dean
Educational Services

D. J. Koval

RE: Consent to participate in
research study
PLEASE READ IMMEDIATELY

DATE: January 23, 1986

Dr. Bernard S. Parker, Vice President for Academic Affairs, and I have given Cheryl Burbano permission to solicit your participation in a graduate research study. Mrs. Burbano is a Saint Leo College alumna, works at the University of South Florida in Continuing Education, and is doing her dissertation research.

The research study is about student evaluations of instructors. Since we require student evaluation of instructors we wish to participate in this study with the hope of learning a more effective way to provide you with feedback for your personal professional development.

The study will be for this current term only. Should you decline to participate, please call or write us immediately. Otherwise, we will proceed to assign you to a group and begin the study.

Please be assured you will receive feedback data from this study. Likewise, be assured your participation is voluntary. All results will be treated confidentially.

APPENDIX H

EVALUATION ADMINISTRATION INSTRUCTIONS

READ TO STUDENTS

The School of Extended Studies (Weekend College of Saint Leo) is participating in an important research study that will last this term only. Involved in this study is the use of a new student evaluation form called IDEA developed by Kansas State University. The results of this study will be important for future planning for the Division of Lifelong Learning (Weekend College). Therefore, your input about this class is both important and appreciated.

Since this form was designed to be useful in many different kinds of classes, not every question applies equally to every kind of class. Please don't worry about this, since the computer analysis of your answers weighs the importance of each question depending upon the kind of course. Answering each question accurately and honestly will provide the most helpful information.

Because of the importance of this study, please turn the card over on the back and write the last four digits of your Social Security number. If you do not have a Social Security number, write the last four letters of your last name. This will help the researcher code your card into the computer, while keeping your answers anonymous. The instructor will only see the total scores for each item and not any individual cards.

Please be sure to darken your responses completely in the bubble. Any questions? Please begin.

APPENDIX I

PART-TIME FACULTY SELF-RATING INSTRUCTION SHEET

INSTRUCTOR:

PLEASE ANSWER EACH ITEM OF THE MID-TERM EVALUATION AS YOU
FEEL YOUR STUDENTS WILL RATE YOU AND THEMSELVES.

IDEA Survey form --- Student Reactions to Instruction and Courses

Your thoughtful answers to these questions will provide helpful information to your instructor.

*Describe the frequency of your instructor's teaching procedures, using the following code:

1-HARDLY EVER 2-OCCASIONALLY 3-SOMETIMES 4-FREQUENTLY 5-ALMOST ALWAYS

The Instructor:

1. Promotes teacher-student discussion (as opposed to mere responses to questions).
2. Finds ways to help students answer their own questions.
3. Encourages students to express themselves freely and openly.
4. Seems enthusiastic about the subject matter.
5. Changes approaches to meet new situations.
6. Gives examinations which stress unnecessary memorization.
7. Speaks with expressiveness and variety in tone of voice.
8. Demonstrates the importance and significance of the subject matter.
9. Makes presentations which are dry and dull.
10. Makes it clear how each topic fits into the course.
11. Explains the reasons for criticisms of students' academic performance.
12. Gives examination questions which are unclear.
13. Encourages student comments even when they turn out to be incorrect or irrelevant.
14. Summarizes material in a manner which aids retention.
15. Stimulates students to intellectual effort beyond that required by most courses.
16. Clearly stated the objectives of the course.
17. Explains course material clearly, and explanations are to the point.
18. Relates course material to real life situations.
19. Gives examination questions which are unreasonably detailed (picky).
20. Introduces stimulating ideas about the subject.

* On each of the objectives listed below, rate the progress you are making in this course compared with that made in other courses you have taken at this university or another university. In this course my progress so far is:

- 1-LOW (lowest 10 percent of courses I have taken here)
- 2-LOW AVERAGE (next 20 percent of courses)
- 3-AVERAGE (middle 40 percent of courses)
- 4-HIGH AVERAGE (next 20 percent of courses)
- 5-HIGH (highest 10 percent of courses)

Progress on:

21. Gaining factual knowledge (terminology, classifications, methods, trends).
22. Learning fundamental principles, generalizations, or theories.
23. Learning to apply course material to improve rational thinking, problem-solving and decision making.
24. Developing specific skills, competencies and points of view needed by professionals in the field most closely related to this course.
25. Learning how professionals in this field go about the process of gaining new knowledge.
26. Developing creative capacities.
27. Developing a sense of personal responsibility (self-reliance, self discipline).
28. Gaining a broader understanding and appreciation of intellectual-cultural activity (music, science, literature, etc.).
29. Developing skill in expressing myself orally or in writing.
30. Discovering the implications of the course material for understanding myself (interests, talents, values, etc.).

* On the next four questions, compare this course with others you have taken at this institution, using the following code:

- 1-MUCH LESS THAN MOST COURSES 2-LESS THAN MOST 3-ABOUT AVERAGE
- 4-MORE THAN MOST 5-MUCH MORE THAN MOST

The course:

31. Amount of reading.
32. Amount of work in other (non-reading) assignments.
33. Difficulty of subject matter.
34. Degree to which the coursehangs together (various topics and class activities are related to each other).

Describe your attitude and behavior in this course, using the following code:

1-DEFINITELY 2-MORE FALSE THAN TRUE 3-IN BETWEEN 4-MORE TRUE THAN FALSE
5-DEFINITELY TRUE

Self-rating so far:

35. I have worked harder in this course than on most courses I have taken.
36. I had a strong desire to take this course.
37. I would like to take another course from this instructor.
38. As a result of taking this course, I have more positive feelings toward this field of study.
39. Leave this space blank.
- A. Blacken space number 1 on the Response Card.

*For the following six questions, B-G, describe the frequency of your instructor's teaching procedures, using the following code:

1-HARDLY EVER 2-OCCASIONALLY 3-SOMETIMES 4-FREQUENTLY 5-ALMOST ALWAYS

The instructor:

- B. Relates various topics and class activities to each other.
- C. Discusses the cultural and ethical values of the subject.
- D. Relates the course materials to other courses and academic fields.
- E. Is willing to spend extra time with students.
- F. Cares about students as people.
- G. Shows interest in student ideas.

*Please answer these additional questions using the following responses:

1-STRONGLY DISAGREE 2-DISAGREE 3-NEITHER AGREE OR DISAGREE 4-AGREE
5-STRONGLY AGREE

40. Compared to others I have had, this instructor is one of the most effective.
41. Overall, this course is of considerable value to me.

INSTRUCTOR:

PLEASE ANSWER EACH ITEM OF THE END-OF-TERM EVALUATION AS
YOU FEEL YOUR STUDENTS WILL RATE YOU AND THEMSELVES.

IDEA SURVEY FORM -- STUDENT REACTIONS TO INSTRUCTION AND COURSES

Your thoughtful answers to these questions will provide helpful information to your instructor.

• Describe the frequency of your instructor's teaching procedures, using the following code:

- 1—Hardly Ever 3—Sometimes 5—Almost Always
2—Occasionally 4—Frequently

The Instructor:

1. Promoted teacher-student discussion (as opposed to mere responses to questions).
2. Found ways to help students answer their own questions.
3. Encouraged students to express themselves freely and openly.
4. Seemed enthusiastic about the subject matter.
5. Changed approaches to meet new situations.
6. Gave examinations which stressed unnecessary memorization.
7. Spoke with expressiveness and variety in tone of voice.
8. Demonstrated the importance and significance of the subject matter.
9. Made presentations which were dry and dull.
10. Made it clear how each topic fit into the course.
11. Explained the reasons for criticisms of students' academic performance.
12. Gave examination questions which were unclear.
13. Encouraged student comments even when they turned out to be incorrect or irrelevant.
14. Summarized material in a manner which aided retention.
15. Stimulated students to intellectual effort beyond that required by most courses.
16. Clearly stated the objectives of the course.
17. Explained course material clearly, and explanations were to the point.
18. Related course material to real life situations.
19. Gave examination questions which were unreasonably detailed (picky).
20. Introduced stimulating ideas about the subject.

• On each of the objectives listed below, rate the progress you have made in this course compared with that made in other courses you have taken at this college or university. In this course my progress was:

- 1—Low (lowest 10 percent of courses I have taken here)
2—Low Average (next 20 percent of courses)
3—Average (middle 40 percent of courses)
4—High Average (next 20 percent of courses)
5—High (highest 10 percent of courses)

Progress on:

1. Gaining factual knowledge (terminology, classifications, methods, trends).
2. Learning fundamental principles, generalizations, or theories.
3. Learning to apply course material to improve rational thinking, problem-solving and decision-making.
4. Developing specific skills, competencies and points of view needed by professionals in the field most closely related to this course.
5. Learning how professionals in this field go about the process of gaining new knowledge.
6. Developing creative capacities.
7. Developing a sense of personal responsibility (self-reliance, self-discipline).
8. Gaining a broader understanding and appreciation of intellectual-cultural activity (music, science, literature, etc.).
9. Developing skill in expressing myself orally or in writing.
10. Discovering the implications of the course material for understanding myself (interests, talents, values, etc.).

• On the next four questions, compare this course with others you have taken at this institution, using the following code:

- 1—Much Less than Most Courses
2—Less than Most
3—About Average
4—More than Most
5—Much More than Most

The Course:

31. Amount of reading.
32. Amount of work in other (non-reading) assignments.
33. Difficulty of subject matter.
34. Degree to which the course hung together (various topics and class activities were related to each other).

• Describe your attitude toward and behavior in this course, using the following code:

- 1—Definitely False 4—More True than False
2—More False than True 5—Definitely True
3—in Between

Self-rating:

35. I worked harder on this course than on most courses I have taken.
36. I had a strong desire to take this course.
37. I would like to take another course from this instructor.
38. As a result of taking this course, I have more positive feelings toward this field of study.
39. Leave this space blank. Continue with question A.

A. Blacken space number 1 on the Response Card.

• For the following six questions, B-G, describe the frequency of your instructor's teaching procedures, using the following code:

- 1—Hardly Ever 3—Sometimes 5—Almost Always
2—Occasionally 4—Frequently

The Instructor:

- B. Related various topics and class activities to each other.
- C. Discussed the cultural and aesthetic values of the subject.
- D. Related the course materials to other courses and academic fields.
- E. Was willing to spend extra time with students.
- F. Cared about students as people.
- G. Showed interest in student ideas.

Please answer these additional questions using the following responses:

- 1—Strongly Disagree
2—Disagree
3—Neither Agree or Disagree
4—Agree
5—Strongly Agree

40. Compared to others I have had, this instructor has been one of the most effective.
41. Overall, this course was of considerable value to me.

APPENDIX J

IDEA FACULTY INFORMATION CARDS INSTRUCTION SHEET

DIRECTIONS FOR COMPLETING INFORMATION CARD II

Faculty Information Card II (purple): Provides space for information about the course, ratings of course objectives, and the optional response section. USE #2 PENCIL ONLY.

1. Department Code, Course number, hours, days and number enrolled will be filled in for you PLEASE DO NOT FILL IN.
2. Print your name on the back of the card.
3. Objectives: Ten objectives are listed below. Rate each of them as: "Of no more than Minor Importance" (M), "Important" (I), or "Essential" (E) by blackening the appropriate letter on Card II. We strongly recommend that you DO NOT select more than a total of 3-5 objectives as "Essential" or "Important." If you have questions, contact your Lifelong Learning coordinator.
 - 1) Gaining factual knowledge (terminology, classifications, methods, trends)
 - 2) Learning fundamental principles, generalizations, or theories
 - 3) Learning to apply course material to improve rational thinking, problem-solving and decision-making
 - 4) Developing specific skills, competencies and points of view needed by professionals in the field most closely related to this course
 - 5) Learning how professionals in this field go about the process of gaining new knowledge
 - 6) Developing creative capacities
 - 7) Developing a sense of personal responsibility (self-reliance, self-discipline)
 - 8) Gaining a broader understanding and appreciation of intellectual-cultural activity (music, science, literature, etc.)
 - 9) Developing skill in expressing oneself orally or in writing
 - 10) Discovering the implications of the course material for understanding oneself (interests, talents, values, etc.)
4. Research Questions: Use response columns A-H for your responses to research questions. These questions are for research purposes only and allow us to study their relationship to student ratings. If a question does not seem to apply or you do not wish to answer, simply leave it blank. However, be certain to darken completely the numerical space below the alphabetic item for those answered.
 - A. Which of the following circumstance apply to the decision to have this specific course rated?
 - 1) Entirely your (the instructor's) decision
 - 2) Informal decision of two or more instructors, e.g., team taught course or group of instructors teaching survey course.
 - 3) You were required to have one (or more) course(s) rated, but you (the instructor) chose the course
 - 4) You were required to have this specific course rated
 - 5) You were required to have all courses rated
 - 6) Other
 - B. What is the primary purpose for obtaining these ratings?
 - 1) Will be used for administrative purposes (promotion, salary increase, etc.) at option of the administration

- 2) May be used for administrative purposes, at option of the instructor
 - 3) For use of students in selecting courses and/or instructors
 - 4) As data for a research project
 - 5) Solely for the use of the instructor as information about instruction
 - 6) Other
- C. What is the secondary purpose for obtaining the ratings? (Use the same options as question B. If there is no secondary purpose, leave blank) _____
- D. How many times have you had this specific course rated using IDEA? _____
- E. How many times have you had any course rated using IDEA? _____
- F. For how many academic years have you used IDEA? (E.g., if this is your first year mark "1") _____
- G. What importance do you give to teaching compared to research?
- 1) Teaching definitely more important
 - 2) Teaching somewhat more important
 - 3) Both equally important
 - 4) Research somewhat more important
 - 5) Research definitely more important
- H. What importance is given to teaching compared to research by those who have the most weight in making the personnel decisions which affect you? (Use the same options as for question G)
5. Academic Rank: In the space below the ratings of the objectives, please indicate your academic rank by marking the appropriate response.

APPENDIX K

FINAL COURSE EVALUATION FOLLOW-UP LETTER



UNIVERSITY OF SOUTH FLORIDA
TAMPA • ST. PETERSBURG • FORT MYERS • SARASOTA

SCHOOL OF EXTENDED STUDIES
DIVISION OF LIFELONG LEARNING
TAMPA, FLORIDA 33620

813 974 2403

M E M O R A N D U M

Date: April, 1986

To:

From: Cheryl M. Burbano, Lifelong Learning Coordinator

Subject: Final Course Evaluation

As you are aware, the School of Extended Studies at the University of South Florida is involved in an important research project this term. This study utilizes a new kind of student evaluation form called IDEA developed by Kansas State University. The results of this study will be important for future planning for the Division of Lifelong Learning. Therefore, your input about this class is both important and appreciated.

Since this form was designed to be useful in many different kinds of classes, not every question applies equally to every kind of class. Please do not worry about this, since the computer analysis of your answers weighs the importance of each question depending upon the kind of course. Answering each question accurately and honestly will provide the most helpful information.

Please complete the enclosed form by placing your responses on the Student Response Card (blue card). Please use pencil only. Return your completed blue card in the enclosed stamped envelope as soon as possible.

Thank you for your help and participation in evaluating your class and in this research project.

APPENDIX L

COMPUTER PRINTED IDEA SUMMARY REPORT, INTERPRETATION GUIDELINES,
AND INSTRUCTOR SELF-RATINGS TO STUDENT RATINGS COMPARISON

IDEA REPORT

ABLE, AA
COURSE NO: 102
DEPT: ECONOMICS -2204
HOURS & DAYS 8:00 MW

STANDARD FORM

UNIVERSITY OF UTOPIA

Similar Courses Refers Only to
Class = MEDIUM (15-34)
Student Motivation = LEVEL 1
(1 = LOWEST LEVEL; 5 = HIGHEST)

No. Enrolled 33
No. Rating 28
% Rating 85
SPRING 1982-XX

Part I. Evaluation (Progress Ratings)

	PERCENT RESPONDING					COMPARISON WITH	
	High					All	Similar
	Low	2	3	4	5	Courses	Courses
A. Subject Matter Mastery						AVERAGE	HIGH
21. ** Factual Knowledge	0	4	32	43	21	0	HIGH
22. ** Principles & Theories	0	4	18	64	14	0	HIGH
24. * Professional Skills & Viewpoints	0	21	36	21	18	4	HIGH AVG
25. Discipline's Methods	18	21	39	18	0	4	NOT APPLICABLE
B. Development of General Skills						LOW AVG	AVERAGE
23. ** Thinking and Problem Solving	0	25	36	25	14	0	AVERAGE
26. * Creative Capacities	4	36	32	29	0	0	AVERAGE
29. * Effective Communication	4	32	18	39	7	0	AVERAGE
C. Personal Development						LOW AVG	LOW AVG
27. Personal Responsibility	14	18	46	18	4	0	NOT APPLICABLE
28. * General Liberal Education	32	32	14	18	4	0	NOT APPLICABLE
30. Implications for Self Understanding	7	54	29	7	4	0	AVERAGE
Overall Evaluation (Progress on Relevant Objectives)						AVERAGE	AVERAGE

Part II. Course Description

	PERCENT RESPONDING					COMPARISON WITH	
	High					All	Similar
	Low	2	3	4	5	Courses	Courses
31. Amount of Reading	4	7	75	4	11	0	AVERAGE
32. Amount of Other Work (Non-reading)	14	57	21	4	4	0	LOW AVG
33. Difficulty of Subject Matter	0	4	21	61	14	0	HIGH AVG
34. Content Integration	0	0	54	32	14	0	AVERAGE

Part III. Students' Self Ratings

	PERCENT RESPONDING					COMPARISON WITH	
	High					All	Similar
	Low	2	3	4	5	Courses	Courses
35. Worked Hard	0	18	36	21	25	0	AVERAGE
36. Strong Desire to Take Course	18	50	11	14	7	0	LOW
37. Would like Instructor Again	11	14	25	14	36	0	AVERAGE
38. Improved Attitude Toward Field	11	18	18	39	7	7	LOW AVG
39. Thoughtful Consideration of Questions	**	**	**	**	**	**	QUESTION

ABLE, AA
UNIVERSITY OF UTOPIA

COURSE: 2204102

(8:00 PMF)

Page 2

Part IV. Methods

Methods	PERCENT RESPONDING							Mean	Difference ¹	Frequency ³
	Low			High						
	1	2	3	4	5	Omit				
A. Involving Students										
1. Promoted Teacher Student Discussion		7	25	21	39	7	0	3.1	-0.5	LOW
2. Helped Students Answer Own Questions	14	14	39	25	7	0	0	3.0	-0.4	LOW
3. Encouraged Students to Express Themselves	7	21	29	18	25	0	3.3	-0.5	LOW	
5. Changed Approaches to Meet New Situations	4	14	29	50	4	0	3.4	0.1	MEDIUM	
11. Explained Reasons for Criticisms	21	7	36	21	14	0	3.0	-0.2	MEDIUM	
13. Encouraged Comments Even if Irrelevant	4	18	25	39	14	0	3.4	-0.2	MEDIUM	
B. Communicating Content and Purpose										
8. Demonstrated the Significance of the Subject	0	4	11	46	39	0	4.2	0.4	HIGH	
10. Made It Clear How Each Topic Fit	4	4	36	43	14	0	3.6	0.0	MEDIUM	
14. Summarized in Ways Which Aided Retention	4	4	25	57	11	0	3.7	0.3	HIGH	
16. Clearly Stated Objectives of the Course	0	4	21	50	25	0	4.0	0.2	MEDIUM	
17. Explained Course Material Clearly	0	0	25	32	43	0	4.2	0.6	HIGH	
18. Related Material to Real Life Situation	0	0	7	50	43	0	4.4	0.7	HIGH	
C. Creating Enthusiasm										
4. Seemed Enthusiastic About the Subject Matter	0	0	4	25	71	0	4.7	0.6	HIGH	
7. Spoke with Expressiveness and Variety	0	0	11	36	54	0	4.4	0.7	HIGH	
9. Made Dry and Dull Presentations	54	32	7	4	4	0	(1.7)	-0.7	(LOW)	
15. Stimulated Students to High Intellectual Effort	0	14	39	21	25	0	3.6	0.5	HIGH	
20. Introduced Stimulating Ideas About the Subject	0	14	36	39	11	0	3.5	0.2	MEDIUM	
D. Preparing Examinations										
(6) Gave Exams Stressing Unnecessary Memorizations	54	18	11	4	7	7	(1.8)	-0.2	(MEDIUM)	
(12) Gave Examination Questions Which Were Unclear	7	4	32	25	25	7	(3.6)	1.5	(HIGH)	
(19) Exam Questions Were Unreasonably Detailed	7	21	32	11	29	0	(3.3)	1.2	(HIGH)	

NOTE 1: Difference from Similar Course Mean

NOTE 2: RELATIVE FREQUENCY

() Refers to Items Where Low Scores are Desirable

NOTE 1: Difference from Similar Course Mean

() Refers to Items Where Low Scores are Desirable

Part V. Additional Questions

ITEM	1	2	3	4	5	OMIT	MEAN
40.	22	88	0	0	0	0	1.8

Part VI. Diagnostic Summary

Students' Progress

28. GENERAL LIBERAL EDUCATION
 23. THINKING & PROBLEM SOLVING
 26. CREATIVE CAPACITIES
 IMP
 29. EFFECTIVE COMMUNICATION
 24. PROFESSIONAL SKILLS & VTEMPT
 21. FACTUAL KNOWLEDGE
 22. PRINCIPLES & THEORIES

Objective Importance	Rating
IMP	L AV
ESS	AVG
IMP	AVG
IMP	AVG
IMP	H AV
ESS	HIGH
ESS	HIGH

Teaching Methods Most Related To Student Progress

Page 3

WEAKNESSES RELEVANT TO PROGRESS	MODERATELY	TO PROGRESS
HIGHLY	3, 2, 3, 1, 12, 19, 1, 12, 3, 2, FAVORABLE PROGRESS: PRESENT METHODS EFFECTIVE FAVORABLE PROGRESS: PRESENT METHODS EFFECTIVE FAVORABLE PROGRESS: PRESENT METHODS EFFECTIVE	7, 9, 4, 17, 15, 14, 15, 8, 18, 7, 9, 4, 15, 18, 7, 9, 4, 17, 7, 9, 17, 15, 8, 14,

iDEA

ABLE, AA
UNIVERSITY OF UTOPIA2204102 (8:00 IMF)
SPRING 1983-84

NOTE 2. Specific Items are Identified on Page 2 of This Report

CLASS SIZE = MEDIUM (33/ 28/ 85%)
CLASS MOTIVATION = LEVEL 1

Part VII. Summary Profile

	Comparison Group	%ile Rank	Low	10	Low-Av	Average	Hi-Av	High
O	OVERALL EVALUATION	34	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
U	(Progress on Relevant Objectives)	65	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000
T	E=21,22,23, 1=24,26,28,29	29	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
C	WOULD LIKE INSTRUCTOR	56	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000
O	AGAIN	16	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
M	IMPROVED ATTITUDE	49	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000
S	TOWARD FIELD							
INVOLVING STUDENTS								
M*	All Courses	16	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
E	Similar Courses	27	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000
T	COMMUNICATING CONTENT	52	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
H	AND PURPOSE	77	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000
O	CREATING ENTHUSIASM	65	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
D	Similar Courses	85	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000
S	PREPARING EXAMINATIONS	8	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
	All Courses	10	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000	000000000000000000
	Similar Courses							

* METHOD PROFILES SHOULD NOT BE USED FOR EVALUATION

INTERPRETING YOUR IDEA REPORT

DIAGNOSTIC SUMMARY

A. THE DIAGNOSTIC SUMMARY (part VI on page 3 of your REPORT) is the single most important part of your IDEA REPORT because it combines other parts of the report. The DIAGNOSTIC SUMMARY lists your objectives (the objectives you selected when you completed the FACULTY INFORMATION FORM). It shows the students' RATING of your progress or rate, identifies (in most cases) TEACHING METHODS you must consider improving in order to help your students make greater progress. You should consider what actually went on in your course related to each teaching method. Usually, such consideration will suggest how you might teach the course differently and more effectively.

B PROGRESS RATINGS

Your objectives are listed according to the amount of progress the students are expected on each, starting with the lowest (since these objectives are usually the ones you will want to work on first). If *LOW* is printed, it means that your average fell in the bottom 10% of averages for instructors teaching **SIMILAR COURSES** (similar in content, size and level of student motivation), **LOW AVERAGE**, the next 10%, **AVERAGE**, the middle 40%, **HIGH AVERAGE**, the next 20%, and **HIGH**, the top 10%. With the IDEA system, the students' rating of their progress on your objectives is the primary criterion of your teaching effectiveness. We recommend that you list/confirm your improvement efforts on those objectives, if any, where the students recorded **LOW** or **LOW AVERAGE** progress.

C. TEACHING METHODS MOST NEEDING ATTENTION

5. **WEAKNESSES RELEVANT TO PROGRESS** refer to teaching methods which our researchware are correlated with students' reports of progress on the given objective. We suggest that improving your use of these teaching methods will lead to greater student progress on your objectives. (The numbers refer to the item numbers on the IDEA Survey Form, a copy of which is printed on the back page of this guide.)

WEAKNESSES were taken from the methods in Part IV. They are teaching methods where the students gave you a LOW rating, i.e., where they reported that you used the method less frequently than instructors in SIMILAR COURSES (familiar in size and level of student motivation). WEAKNESSES are listed only when your students reported AVERAGE or less progress on your ESSENTIAL or IMPORTANT objectives. Note that for methods 6, 9, 12, and 19, where instructor ratings are desirable, methods which the students reported you used with HIGH frequency are considered WEAKNESSES.

2 STRENGTHS RELEVANT TO PROGRESS ARE METHODS RELATED TO YOUR OBJECTIVES

STRENGTHS when you try to improve **WEAKNESSES**

3. If your students reported HIGH or HIGH AVERAGE progress, we do not suggest

to your students expect that you change any of your teaching methods, no matter how "atypical" your approach may be

U Since the twenty teaching methods which the IDEA system uses obviously do not include all of the methods which could help students make progress on an objective, occasionally the **DIAGNOSTIC SUMMARY** will list any specific teaching methods as **WEAKNESSES**, even though the progress which the students reported on objectives is not as high as one might wish. In such a case, you are best advised to look beyond the IDEA items for suggestions about improvement. Consider the space between the **DIAGNOSTIC SUMMARY** and the **CONCLUSIONS** on the **REPORT CARD**. You asked any, and all, the post-scribed comments by our on-campus students (on the back of the Responses Card), also signed with your on-campus ID#555. If you asked any, and all, the post-scribed comments by our on-campus coordinator, a colleague, your department head, or 717 or appropriate people on your campus.

If you really understand your DIAGNOSTIC SUMMARY, you understand how the IDEA REPORT can help you to consider what you might do to improve your teaching. The rest of this guide explains the other six parts of your report.

UNIVERSITY OF SOUTH FLORIDA
Division of Lifelong Learning

Instr:

Evaluation Date:

IDEA Mid-Term Evaluation Report by Item

		Student Eval.	Instructor	
<u>Item No.</u>	<u>Mean</u>		<u>Self-Evaluation</u>	<u>Difference</u>
21.	_____		_____	_____
22.	_____		_____	_____
PART I 24.	_____		_____	_____
PRO- 25.	_____		_____	_____
GRESS 23.	_____		_____	_____
RATINGS 26.	_____		_____	_____
29.	_____		_____	_____
27.	_____		_____	_____
28.	_____		_____	_____
30.	_____		_____	_____
PART II 31.	_____		_____	_____
COURSE 32.	_____		_____	_____
DESCRIP-33.	_____		_____	_____
TION 34.	_____		_____	_____
35.	_____		_____	_____
PART III 36.	_____		_____	_____
STUDENTS' 37.	_____		_____	_____
SELF- 38.	_____		_____	_____
RATING				

	<u>Item No.</u>	Student Eval.	Instructor	<u>Difference</u>
		<u>Mean</u>	<u>Self-Evaluation</u>	
	1.	_____	_____	_____
	2.	_____	_____	_____
	3.	_____	_____	_____
	5.	_____	_____	_____
PART IV	11.	_____	_____	_____
TEACHING	13.	_____	_____	_____
METHODS	8.	_____	_____	_____
	10.	_____	_____	_____
	14.	_____	_____	_____
	16.	_____	_____	_____
	17.	_____	_____	_____
	18.	_____	_____	_____
	4.	_____	_____	_____
	7.	_____	_____	_____
	(9).	_____	_____	_____
	15.	_____	_____	_____
	20.	_____	_____	_____
	(6).	_____	_____	_____
	(12).	_____	_____	_____
	(19).	_____	_____	_____
PART V	40.	_____	_____	_____
EXTRA				
QUESTIONS	41.	_____	_____	_____

* () Refers for items where low scores are desirable

APPENDIX M

LEARNING CHARACTERISTICS OF ADULT STUDENTS

LEARNING CHARACTERISTICS OF ADULT STUDENTS

The following is a list of mature student learning characteristics:

1. Adult students are a self-selected group and are in your course because they want to be there.
2. Adults prefer instructor-centered instructions in which the instructor controls the organization and content of each class meeting. This preference is usually due to conditioning, and results in a feeling that informal teacher-student sessions are usually a waste of time.
3. Adult students prefer a controlled reciprocal relationship with an instructor, where they can share pertinent knowledge and experience that they as students bring to a course. It is important that adult students who possess accumulated experience be recognized.
4. Adults are interested in task-centered learning; thus the relevance of the course material should be made very clear to them. They want to be able to see how they will use the information they are learning.
5. Despite a preference for instructor-centered instruction, adult students prefer an informal learning atmosphere where they can feel comfortable asking questions and making comments.

APPENDIX N

COVER MEMO FOR MID-TERM EVALUATION SUMMARY EXPLANATION
(PRINTED FEEDBACK ONLY GROUP)



UNIVERSITY OF SOUTH FLORIDA
TAMPA • ST. PETERSBURG • FORT MYERS • SARASOTA

SCHOOL OF EXTENDED STUDIES
DIVISION OF CONFERENCES & INSTITUTES
TAMPA, FLORIDA 33620

813: 974-2403

March/April, 1986

M E M O R A N D U M

TO:

FROM: Cheryl M. Burbano, Lifelong Learning Coordinator

SUBJECT: Mid-Term Evaluation Summary

Please find enclosed your copy of the IDEA Report of your mid-term student evaluation of instruction. All interpretative data is found on the backside. Also enclosed is an additional report which compares the mean student rating (average) you received on each individual item to your own self-evaluation. Included in this report is a difference score for each item showing the difference of your average student rating minus your self-rating. Therefore, a negative difference score indicates a discrepancy between your perceived teaching behavior and how the students actually rated your behavior.

The final student evaluation for your course is scheduled for _____
Please contact me at 974-2403 if this needs to be re-scheduled.

APPENDIX O

ANOVA TABULAR SUMMARY OF RESULTS OF HYPOTHESIS 1

ANOVA BETWEEN GROUPS
GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 21-Factual Knowledge

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R Square	C.V.
Model	3	3.35879934	1.11959978	4.11	.0088	.120426	13.8635
Error	90	24.53226449	.27258072		Root MSE		Mean
Corrected Total	93	27.89106383			.52209263		3.76595745
Source	DF	Type I SS	F Value	DF	Type III SS	F Value	PR>F
Group	3	3.35879934	4.11	3	3.35879934	4.11	.0088

ANOVA BETWEEN GROUPS
GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 22-Princ. & Theory

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.
Model	3	3.35577899	1.11859300	4.95	.0032	.141594	12.5517
Error	90	20.34422101	.22684690		Root MSE		Mean
Corrected Total	93	23.70000000			.47544390		3.80000000
Source	DF	Type I SS	F Value	DF	Type III SS	F Value	PR>F
Group	3	3.35577899	4.95	3	3.35577899	4.95	.0032

ANOVA BETWEEN GROUPS

GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 24-Prof. Skills & Viewpoints

Source	DF	Sum of Squares	Mean Square	F Value	Pr>F	R-Square	C.V.
Model	3	4.29210954	1.43070318	3.66	.0153	.108765	17.1817
Error	90	25.17001812	.39077798		Root MSE		Mean
Corrected Total	93	39.46222766			.62512237		3.63829787
Source	DF	Type I SS	F Value	DF	Type III SS	F Value	Pr>F
Group	3	4.29210954	3.66	3	4.29210954	3.66	.0153

ANOVA BETWEEN GROUPS

GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 25-Disc. Methods

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.	
Model	3	3.96496916	1.32165639	2.81	.0439	.085668	19.7176	
Error	90	42.31811594	.04702012		Root MSE		Mean	
Corrected Total	93	46.28308511			.68571225		3.47765957	
Source	DF	Type I SS	F Value	PR>F	DF	Type III SS	F Value	PR>F
Group	3	3.96495916	2.81	.0439	3	3.96496916	2.81	.0439

ANOVA BETWEEN GROUPS
GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 23-Thinking & Problem Solving

Source	DF	Sum of Squares	Mean Square	F Value	Pr>F	R-Square	C.V.
Model	3	1.43483965	.47827988	1.44	.2539	.045858	15.1437
Error	90	29.85420290	.33171337		Root MSE		Mean
Corrected Total	93	31.28904255			.57594563	3.80319149	
Source	DF	Type I SS	F Value	PR>F	DF	F Value	PR>F
Group	3	1.43483965	1.44	.2359	3	1.44	.2359
						1.43483965	

ANOVA BETWEEN GROUPS
GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 26-Creative Cap.

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R Square	C.V.
Model	3	4.39034883	1.46344961	3.66	.0152	.108861	17.8281
Error	90	35.93943841	.39932709		Root MSE		Mean
Corrected Total	93				.63192333		3.54255319
Source	DF	Type I SS	F Value	PR>F	Type III SS	F Value	PR>F
Group	3	4.39034883	3.66	.0152	4.39034883	3.66	.0152

ANOVA BETWEEN GROUPS

GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 29-Effective Comm.

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.
Model	3	1.56189061	.052630920	.68	.5660	.022192	25.9544
Error	90	68.81864130	.7545157		Root MSE		Mean
Corrected Total	93	70.38053191			.8744358		3.36914894
Source	DF	Type I SS	F Value	PR>F	DF	Type III SS	F Value
Group	3	1.56189061	.68	.5660	3	1.56189061	.68
							.5660

ANOVA BETWEEN GROUPS

GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 27-Person. Respon.

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R Square	C.V.
Model	3	2.04270968	.68090323	1.66	.1804	.052550	17.3540
Error	90	36.82931159	.40921450		Root MSE		Mean
Corrected Total	93	38.87202128			.63969881		3.68617021
Source	DF	Type I Ss	F Value	PR>F	Type III SS	F Value	PR>F
Group	3	2.04270968	1.66	.1804	2.04270968	1.66	.1804

ANOVA BETWEEN GROUPS

GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 28-Gen, Lib, Educ. Basic Skills Mathematics

Source	DF	Sum of Squares	Mean Square	F Value	Pr>F	R Square	C.V.
Model	3	4.37504702	1.45834901	2.50	.0646	.076902	24.2994
Error	90	52.51612319	.58351248		Root MSE		Mean
Corrected Total	93	56.89117021			.76387989		3.14361702
Source	DF	Type I SS	F Value	DF	Type III SS	F Value	Pr>F
Group	3	4.37504702	2.50	3	4.37504702	2.50	.0646

ANOVA BETWEEN GROUPS

GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 30-Implic. for Self-Understanding

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R Square	C.V.
Model	3	2.22934012	.74311337	1.49	.2223	.047355	19.8076
Error	90	44.84768116	.49830757		Root MSE		Mean
Corrected Total	93	47.07702128			.70590904		3.56382979
Source	DF	Type I SS	F Value	PR>F	Type III SS	F Value	PR>F
Group	3	2.22934012	1.49	.2223	2.22934012	1.49	.2223

ANOVA BETWEEN GROUPS

GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: Overall Score

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.
Model	3	7.36544095	2.45514698	1.88	.1378	.059110	36.1235
Error	90	117.24094203	1.30267713		Root MSE		Mean
Corrected Total	93	124.60638298			1.14134882		3.15957447
Source	DF	Type I SS	F Value	PR>F	Type III SS	F Value	PR>F
Group	3	7.36544095	1.88	.1378	7.36544095	1.38	.1378

APPENDIX P

ANOVA TABULAR SUMMARY OF RESULTS OF HYPOTHESIS 5

ANOVA BETWEEN GROUPS
GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 21 Factual Knowledge

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R Square	C.V.
Model	1	1.52154002	1.52154002	7.23	0.0100	0.138434	11.6479
Error	45	9.4695231	.21043386				Mean
Corrected Total	46	10.99106383					0.45873071
Source	DF	Type I SS	F Value	PR>F	Type III SS	F Value	PR>F
Group	1	1.52154002	7.23	0.0100	1.52154002	7.23	0.0100

ANOVA BETWEEN GROUPS

GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 22 Principles & Theories

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.
Model	1	0.6563651	0.65653651	3.90	0.0545	0.0799714	10.3762
Error	45	7.57963370	0.16843636		Root MSE		Mean
Corrected Total	46	8.23617021			0.41040992		3.95531915
Source	DF	Type I SS	F Value	PR>F	Type III SS	F Value	PR>F
Group	1	0.65653651	3.90	0.0545	0.65653651	3.90	0.0545

ANOVA BETWEEN GROUPS

GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 24 Professional Skills & Viewpoints

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.
Model	1	1.02900203	1.02900203	3.41	0.0714	0.070449	14.3905
Error	45	13.57738095	0.30171958		Root MSE		Mean
Corrected Total	45	14.60638298			0.54929007		3.81702128
Source	DF	Type I SS	F Value	PR>F	Type III SS	F Value	PR>F
Group	1	1.02900203	3.41	0.0714	1.02900203	3.41	0.0714

ANOVA BETWEEN GROUPS
GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 25 Discipline's Methods

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.
Model	1	0.01558725	0.01558725	0.04	0.8521	0.000781	18.138
Error	45	19.94271062	0.44317135		Root MSE		Mean
Corrected Total	46	19.95829787			.066571116		3.67021277
Source	DF	Type I SS	F Value	PR>F	Type III SS	F Value	PR>F
Group	1	0.01558725	0.04	0.8521	0.01558725	0.04	0.8521

ANOVA BETWEEN GROUPS

GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 23 Thinking & Problem Solving

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R Square	C.V.
Model	1	1.13680306	1.13680306	4.48	0.0398	0.090596	12.8910
Error	45	11.41128205	0.25358405				Mean
Corrected Total	46	12.54808511					3.90638298
Source	DF	Type I SS	F Value	DF	Type III SS	F Value	PR>F
Group	1	1.13680306	4.48	1	1.13680306	4.48	0.0398
					Root MSE		
					0.50357129		

ANOVA BETWEEN GROUPS
GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 26 Creative Capacities

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.
Model	1	0.32127815	0.32127815	0.79	0.3777	0.017336	17.2528
Error	45	18.21106227	0.40469027				Mean
Corrected Total	46	18.53234043					3.68723404
Source	DF	Type I SS	F Value	PR>F	Type III SS	F Value	PR>F
Group	1	0.32127815	0.79	0.3777	0.32127815	0.79	0.3777
					Root MSE		
					0.63615271		

ANOVA BETWEEN GROUPS

GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 29 Effective Communication

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.	
Model	1	0.00429624	0.00429624	0.01	0.9369	0.00141	24.1227	
Error	45	30.46038462	0.67689744	Root MSE			Mean	
Corrected Total	49	30.46468085	0.82273777			3.41063830		
Source	DF	Type I SS	F Value	PR>F	DF	Type III SS	F Value	PR>F
Group	1	0.00429624	0.01	0.9369	1	0.00429624	0.01	0.9369

ANOVA BETWEEN GROUPS
GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 27 Personal Responsibility

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.
Model	1	0.64245032	0.64245032	1.85	0.1803	0.039530	15.5515
Error	45	15.60989011	0.34688645				Mean
Corrected Total	46	16.25234043					3.78723404
Source	DF	Type I SS	F Value	PR>F	Type III SS	F Value	PR>F
Group	1	0.64245032	1.85	0.1803	0.64245032	1.85	0.1803
					Root MSE		
					0.58897067		

ANOVA BETWEEN GROUPS
GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 28 General Liberal Education

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.
Model	1	0.73352973	0.73352973	1.21	0.2765	0.026259	23.7588
Error	45	27.20051282	0.60445584				Mean
Corrected Total	46	27.93404255					3.27234043
Source	DF	Type I SS	F Value	PR>F	Type III SS	F Value	PR>F
Group	1	0.73352973	1.21	0.2765	0.73352973	1.21	0.2765
					Root MSE		
					0.77746758		

ANOVA BETWEEN GROUPS
GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: 30 Implications for Self-Understanding

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.
Model	1	1.30785753	1.30785753	3.99	0.0518	0.081472	15.5513
Error	45	14.74490842	0.32766463				Mean
Corrected Total	46	16.05276596					3.68085106
Source	DF	Type I SS	F Value	PR>F	DF	Type III SS	F Value
Group	1	1.30785753	3.99	0.0518	1	1.30785753	3.99
						Root MSE	Mean
						0.57241998	3.68085106

ANOVA BETWEEN GROUPS

GENERAL LINEAR MODELS PROCEDURE

Dependent Variable: Overall Evaluation

Source	DF	Sum of Squares	Mean Square	F Value	PR>F	R-Square	C.V.
Model	1	1.39649691	1.39649691	3.50	0.0618	0.0824	6.39914
Error	45	42.31	0.03845182		Root MSE		Mean
Corrected Total	46	4.89213455			0.31142195		3.39512849
Source	DF	Type I SS	F Value	PR>F	Type III SS	F Value	PR>F
Group	1	1.39649691	3.50	0.0618	1.39649691	3.50	0.0618

BIOGRAPHICAL SKETCH

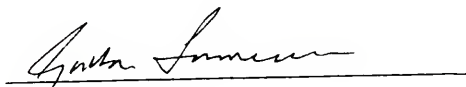
Cheryl M. Burbano was born in Cleveland, Ohio, where she also attended elementary school. After moving to Florida in 1961, she graduated from Chamberlain High School in 1967. In 1971 she received her Bachelor of Arts degree in German and Spanish from Saint Leo College, Saint Leo, Florida. Shortly after receiving her Master of Arts degree in counselor education from the University of South Florida in 1974, she was employed as an elementary school counselor in Pasco County, Florida. It was during her employment as an administrator at Pasco-Hernando Community College in 1979 that she began work on her doctorate at the University of Florida. For the past four years, she has been continuing her career in education as a program coordinator in the Division of Lifelong Learning at the University of South Florida. She plans on continuing her career as an administrator of continuing education programs at U.S.F.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

A handwritten signature in cursive script, reading "Albert B. Smith III", written over a horizontal line.

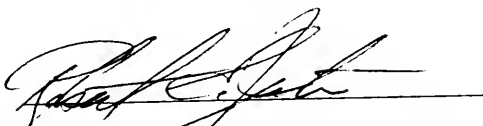
Albert B. Smith III, Chairman
Professor, Educational Leadership

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

A handwritten signature in cursive script, reading "Gordon Lawrence", written over a horizontal line.

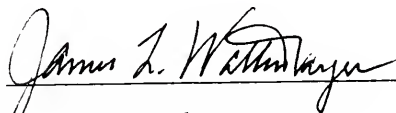
Gordon Lawrence,
Professor, Educational Leadership

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

A handwritten signature in cursive script, reading "Robert E. Jester", written over a horizontal line.

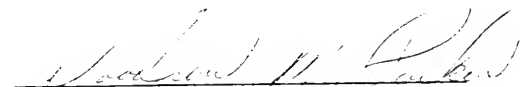
Robert E. Jester,
Associate Professor,
Foundations of Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



James L. Wattenbarger,
Professor, Educational Leadership

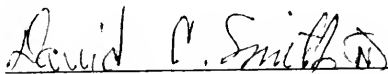
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Woodrow M. Parker,
Professor, Counselor Education

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

May, 1987



Dean, College of Education

Dean, Graduate School

UNIVERSITY OF FLORIDA



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